

SPLIT-TYPE, AIR CONDITIONERS

January 2025

No. OCD886-T

TECHNICAL & SERVICE MANUAL

Outdoor unit

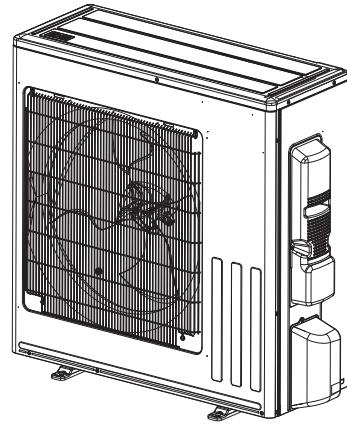
R454B

Models

SUZ-AA09NLHZ-U1
SUZ-AA12NLHZ-U1
SUZ-AA15NLHZ-U1
SUZ-AA18NLHZ-U1

Note:

- This manual describes service data of the outdoor units only.



SUZ-AA09/12/15/18NLHZ

Contents

Service manual

1. COMBINATION OF INDOOR AND OUTDOOR UNITS	2
2. SAFETY PRECAUTION	3
3. PART NAMES AND FUNCTIONS	9
4. SPECIFICATION	10
5. OUTLINES AND DIMENSIONS	12
6. WIRING DIAGRAM	13
7. REFRIGERANT SYSTEM DIAGRAM	15
8. DATA	17
9. ACTUATOR CONTROL	26
10. SERVICE FUNCTIONS	27
11. TROUBLESHOOTING	27
12. FUNCTION SETTING	47
13. DISASSEMBLY INSTRUCTIONS	51

Technical data

T1. SPECIFICATIONS CONNECTED TO INDOOR UNITS	63
T2. POSITION OF THE CENTER OF GRAVITY	70
T3. NOISE CRITERION CURVES	71
T4. DATA	72
T5. CORRECTION FACTORS	74
T6. CAPACITY CORRECTION RATIO CURVE FOR PIPING LENGTH	75
T7. PART LOAD CAPACITY CHART	76
T8. EARTHQUAKE-PROOF STRENGTH ANALYSIS	126

COMBINATION OF INDOOR AND OUTDOOR UNITS

Indoor unit		Outdoor unit							
		SUZ-							
Service Ref.	Service Manual No.	AA18NL(H)-U1	AA24NL(H)-U1	AA30NL(H)-U1	AA36NL(H)-U1	AA09NLHZ-U1	AA12NLHZ-U1	AA15NLHZ-U1	AA18NLHZ-U1
SLZ-AF09/12/15/18NL-U1	OCH857	○	—	—	—	○	○	○	○
SEZ-AE09/12/15/18NL-U1	HWE24090	○	—	—	—	○	○	○	○
PEAD-AA09/12/15/18/24/30/36NL-U1	HWE24030	○	○	○	○	○	○	○	○
SVZ-AP12/18/24/30/36NL-U1	—	○	○	○	○	—	○	—	○
MLZ-KX09/12/18NL-U1	OBH943	○	—	—	—	○	○	—	○
MSZ-EX09/12/15/18NL(B/S/W)-U1	TBH238	○	—	—	—	○	○	○	○
MFZ-KX09/12/15/18NL-U1	OBH944	○	—	—	—	○	○	○	○

MEANING OF SYMBOLS DISPLAYED ON THE UNIT

	Refrigerant Safety Group A2L	WARNING (Risk of fire)	This unit uses a flammable refrigerant. If the refrigerant leaks and comes in contact with fire or heating part, it will create harmful gas and there is risk of fire.
			Read the OPERATING MANUAL carefully before operation.
			Service personnel are required to carefully read the OPERATION MANUAL and INSTALLATION MANUAL before operation.
			Further information is available in the OPERATING MANUAL, INSTALLATION MANUAL, and the like.

2-1. ALWAYS OBSERVE FOR SAFETY

Before obtaining access to terminal, all supply circuits must be disconnected.

2-2. CAUTIONS RELATED TO NEW REFRIGERANT

Cautions for units utilizing refrigerant R454B

Do not use the existing refrigerant piping. The old refrigerant and lubricant in the existing piping contains a large amount of chlorine which may cause the lubricant deterioration of the new unit.	Use a vacuum pump with a reverse flow check valve. Vacuum pump oil may flow back into refrigerant cycle and that can cause deterioration of refrigerant oil, etc.										
Make sure that the inside and outside of refrigerant piping is clean and it has no contaminants such as sulfur, oxides, dirt, shaving particles, etc., which are hazard to refrigerant cycle. In addition, use pipes with specified thickness. Contamination inside refrigerant piping can cause deterioration of refrigerant oil, etc.	Use the following tools specifically designed for use with R454B refrigerant. The following tools are necessary to use R454B refrigerant. <table border="1" style="margin-left: 20px;"> <thead> <tr> <th colspan="2">Tools for R454B</th> </tr> </thead> <tbody> <tr> <td>Gauge manifold</td> <td>Flare tool</td> </tr> <tr> <td>Charge hose</td> <td>Size adjustment gauge</td> </tr> <tr> <td>Gas leak detector</td> <td>Vacuum pump adaptor</td> </tr> <tr> <td>Torque wrench</td> <td>Electronic refrigerant charging scale</td> </tr> </tbody> </table>	Tools for R454B		Gauge manifold	Flare tool	Charge hose	Size adjustment gauge	Gas leak detector	Vacuum pump adaptor	Torque wrench	Electronic refrigerant charging scale
Tools for R454B											
Gauge manifold	Flare tool										
Charge hose	Size adjustment gauge										
Gas leak detector	Vacuum pump adaptor										
Torque wrench	Electronic refrigerant charging scale										
Store the piping indoors, and keep both ends of the piping sealed until just before brazing. (Leave elbow joints, etc. in their packaging.) If dirt, dust or moisture enters into refrigerant cycle, that can cause deterioration of refrigerant oil or malfunction of compressor.	Handle tools with care. If dirt, dust or moisture enters into refrigerant cycle, that can cause deterioration of refrigerant oil or malfunction of compressor.										
The refrigerant oil applied to flare and flange connections must be ester oil, ether oil or alkylbenzene oil in a small amount. If large amount of mineral oil enters, that can cause deterioration of refrigerant oil, etc.	Do not use a charging cylinder. If a charging cylinder is used, the composition of refrigerant will change and the efficiency will be lowered.										
Charge refrigerant from liquid phase of gas cylinder. If the refrigerant is charged from gas phase, composition change may occur in refrigerant and the efficiency will be lowered.	Use the specified refrigerant only. Never use any refrigerant other than that specified. Doing so may cause a burst, an explosion, or fire when the unit is being used, serviced, or disposed of. Correct refrigerant is specified on name plate of outdoor unit. If other refrigerant (R22, etc.) is used, chlorine in refrigerant can cause deterioration of refrigerant oil, etc. We will not be held responsible for mechanical failure, system malfunction, unit breakdown or accidents caused by failure to follow the instructions.										
Ventilate the room if refrigerant leaks during operation. If refrigerant comes into contact with a flame, poisonous gases will be released.											

[1] Warning for service

- (1) Do not alter the unit.
- (2) For installation and relocation work, follow the instructions in the Installation Manual and use tools and pipe components specifically made for use with refrigerant specified in the outdoor unit installation manual.
- (3) Ask a dealer or an authorized technician to install, relocate and repair the unit.
- (4) This unit should be installed in rooms which exceed the floor space specified in outdoor unit installation manual. Refer to outdoor unit installation manual.
- (5) Install the indoor unit at least 2.5 m above floor or grade level.
For appliances not accessible to the general public.
- (6) Refrigerant pipes connection shall be accessible for maintenance purposes.
- (7) If the air conditioner is installed in a small room or closed room, measures must be taken to prevent the refrigerant concentration in the room from exceeding the safety limit in the event of refrigerant leakage. Should the refrigerant leak and cause the concentration limit to be exceeded, hazards due to lack of oxygen in the room may result.
- (8) Keep gas-burning appliances, electric heaters, and other fire sources (ignition sources) away from the location where installation, repair, and other air conditioner work will be performed.
If refrigerant comes into contact with a flame, poisonous gases will be released.
- (9) When installing or relocating, or servicing the air conditioner, use only the specified refrigerant written on outdoor unit to charge the refrigerant lines.
Do not mix it with any other refrigerant and do not allow air to remain in the lines.
If air is mixed with the refrigerant, then it can be the cause of abnormal high pressure in the refrigerant line, and may result in an explosion and other hazards.
- (10) After installation has been completed, check for refrigerant leaks. If refrigerant leaks into the room and comes into contact with the flame of a heater or portable cooking range, poisonous gases will be released.
- (11) Do not use low temperature solder alloy in case of brazing the refrigerant pipes.
- (12) When performing brazing work, be sure to ventilate the room sufficiently. Make sure that there are no hazardous or flammable materials nearby.
When performing the work in a closed room, small room, or similar location, make sure that there are no refrigerant leaks before performing the work.
If refrigerant leaks and accumulates, it may ignite or poisonous gases may be released.
- (13) Do not install the unit in places where refrigerant may build-up or places with poor ventilation such as a semi-basement or a sunken place in outdoor: Refrigerant is heavier than air, and inclined to fall away from the leak source.
- (14) Do not use means to accelerate the defrosting process or to clean, other than those recommended by the manufacturer.
- (15) The appliance shall be stored in a room without continuously operating ignition sources (for example: open flames, an operating gas appliance or an operating electric heater).
- (16) Do not pierce or burn.
- (17) Be aware that refrigerants may not contain an odour.
- (18) Pipe-work shall be protected from physical damage.
- (19) The installation of pipe-work shall be kept to a minimum.
- (20) Compliance with national gas regulations shall be observed.
- (21) Keep any required ventilation openings clear of obstruction.
- (22) Servicing shall be performed only as recommended by the manufacturer.
- (23) The appliance shall be stored in a well-ventilated area where the room size corresponds to the room area as specified for operation.
- (24) Maintenance, service and repair operations shall be performed by authorized technician with required qualification.
Be sure to use a filter drier for new refrigerant.

[2] Cautions for service

- (1) Perform service after recovering the refrigerant left in unit completely.
- (2) Do not release refrigerant in the air.
- (3) After completing service, charge the cycle with specified amount of refrigerant.
- (4) When performing service, install a filter drier simultaneously.
Be sure to use a filter drier for new refrigerant.

[3] Additional refrigerant charge

When charging directly from cylinder

- (1) Check that cylinder for R32 available on the market is a syphon type.
- (2) Charging should be performed with the cylinder of syphon stood vertically. (Refrigerant is charged from liquid phase.)

[4] Cautions for unit using R454B refrigerant

Basic work procedures are the same as those for conventional units using refrigerant R410A. However, pay careful attention to the following points.

(1) Information on servicing

(1-1) Checks to the area

Prior to beginning work on systems containing FLAMMABLE REFRIGERANTS, safety checks are necessary to ensure that the risk of ignition is minimized.

For repair to the REFRIGERATING SYSTEM, 1-2 to 1-6 shall be completed prior to conducting work on the system.

(1-2) Work Procedure

Work shall be undertaken under a controlled procedure so as to minimize the risk of a flammable gas or vapour being present while the work is being performed.

(1-3) General work area

All maintenance staff and others working in the local area shall be instructed on the nature of work being carried out. Work in confined spaces shall be avoided.

(1-4) Checking for presence of refrigerant

The area shall be checked with an appropriate refrigerant detector prior to and during work, to ensure the technician is aware of potentially toxic or flammable atmospheres.

Ensure that the leak detection equipment being used is suitable for use with all applicable refrigerants, i.e. nonsparking, adequately sealed or intrinsically safe.

(1-5) Presence of fire extinguisher

If any hot work is to be conducted on the refrigerating equipment or any associated parts, appropriate fire extinguishing equipment shall be available to hand.

Have a dry powder or CO₂ fire extinguisher adjacent to the charging area.

(1-6) No ignition sources

No person carrying out work in relation to a REFRIGERATING SYSTEM which involves exposing any pipe work shall use any sources of ignition in such a manner that it may lead to the risk of fire or explosion.

All possible ignition sources, including cigarette smoking, should be kept sufficiently far away from the site of installation, repairing, removing and disposal, during which refrigerant can possibly be released to the surrounding space.

Prior to work taking place, the area around the equipment is to be surveyed to make sure that there are no flammable hazards or ignition risks. "No Smoking" signs shall be displayed.

(1-7) Ventilated area

Ensure that the area is in the open or that it is adequately ventilated before breaking into the system or conducting any hot work. A degree of ventilation shall continue during the period that the work is carried out.

The ventilation should safely disperse any released refrigerant and preferably expel it externally into the atmosphere.

(1-8) Checks to the refrigerating equipment

Where electrical components are being changed, they shall be fit for the purpose and to the correct specification.

At all times the manufacturer's maintenance and service guidelines shall be followed. If in doubt, consult the manufacturer's technical department for assistance.

The following checks shall be applied to installations using FLAMMABLE REFRIGERANTS:

- the actual REFRIGERANT CHARGE is in accordance with the room size within which the refrigerant containing parts are installed.
- the ventilation machinery and outlets are operating adequately and are not obstructed.
- marking to the equipment continues to be visible and legible. Markings and signs that are illegible shall be corrected.
- refrigerating pipe or components are installed in a position where they are unlikely to be exposed to any substance which may corrode refrigerant containing components, unless the components are constructed of materials which are inherently resistant to being corroded or are suitably protected against being so corroded.

(1-9) Checks to electrical devices

Repair and maintenance to electrical components shall include initial safety checks and component inspection procedures. If a fault exists that could compromise safety, then no electrical supply shall be connected to the circuit until it is satisfactorily dealt with.

If the fault cannot be corrected immediately but it is necessary to continue operation, an adequate temporary solution shall be used. This shall be reported to the owner of the equipment so all parties are advised.

Initial safety checks shall include:

- that capacitors are discharged: this shall be done in a safe manner to avoid possibility of sparking.
- that no live electrical components and wiring are exposed while charging, recovering or purging the system.
- that there is continuity of earth bonding.

(2) Repairs to sealed components

Sealed electrical components shall be replaced.

(3) Repair to intrinsically safe components

Intrinsically safe components must be replaced.

(4) Cabling

Check that cabling will not be subject to wear, corrosion, excessive pressure, vibration, sharp edges or any other adverse environmental effects.

The check shall also take into account the effects of aging or continual vibration from sources such as compressors or fans.

(5) Detection of flammable refrigerants

Under no circumstances shall potential sources of ignition be used in the searching for or detection of refrigerant leaks. A halide torch (or any other detector using a naked flame) shall not be used.

The following leak detection methods are deemed acceptable for all refrigerant systems.

Electronic leak detectors may be used to detect refrigerant leaks but, in the case of FLAMMABLE REFRIGERANTS, the sensitivity may not be adequate, or may need re-calibration. (Detection equipment shall be calibrated in a refrigerant-free area.)

Ensure that the detector is not a potential source of ignition and is suitable for the refrigerant used.

Leak detection equipment shall be set at a percentage of the LFL of the refrigerant and shall be calibrated to the refrigerant employed, and the appropriate percentage of gas (25 % maximum) is confirmed.

Leak detection fluids are also suitable for use with most refrigerants but the use of detergents containing chlorine shall be avoided as the chlorine may react with the refrigerant and corrode the copper pipe-work.

If a leak is suspected, all naked flames shall be removed / extinguished.

If a leakage of refrigerant is found which requires brazing, all of the refrigerant shall be recovered from the system, or isolated (by means of shut off valves) in a part of the system remote from the leak. Removal of refrigerant shall be according to 2-4.6.

(6) Removal and evacuation

When breaking into the refrigerant circuit to make repairs - or for any other purpose -conventional procedures shall be used. However, for flammable refrigerants it is important that best practice be followed, since flammability is a consideration.

The following procedure shall be adhered to:

- safely remove refrigerant following local and national regulations;
 - evacuate
 - purge the circuit with inert gas
 - evacuate
 - continuously flush or purge with inert gas when using flame to open circuit
 - open the circuit

The refrigerant charge shall be recovered into the correct recovery cylinders if venting is not allowed by local and national codes.

For appliances containing flammable refrigerants, the system shall be purged with oxygen-free nitrogen to render the appliance safe for flammable refrigerants. This process might need to be repeated several times.

Compressed air or oxygen shall not be used for purging refrigerant systems.

For appliances containing flammable refrigerants, refrigerants purging shall be achieved by breaking the vacuum in the system with oxygen-free nitrogen and continuing to fill until the working pressure is achieved, then venting to atmosphere, and finally pulling down to a vacuum.

This process shall be repeated until no refrigerant is within the system. When the final oxygen-free nitrogen charge is used, the system shall be vented down to atmospheric pressure to enable work to take place.

The outlet for the vacuum pump shall not be close to any potential ignition sources, and ventilation shall be available.

(7) Charging procedures

In addition to conventional charging procedures, the following requirements shall be followed.

- Ensure that contamination of different refrigerants does not occur when using charging equipment. Hoses or lines shall be as short as possible to minimize the amount of REFRIGERANT contained in them.
- Cylinders shall be kept in an appropriate position according to the instructions.
- Ensure that the REFRIGERATING SYSTEM is earthed prior to charging the system with refrigerant.
- Label the system when charging is complete (if not already).
- Extreme care shall be taken not to overfill the REFRIGERATING SYSTEM.

Prior to recharging the system, it shall be pressure-tested with the appropriate purging gas. The system shall be leak-tested on completion of charging but prior to commissioning. A follow up leak test shall be carried out prior to leaving the site.

(8) Decommissioning

Before carrying out this procedure, it is essential that the technician is completely familiar with the equipment and all its detail. It is recommended good practice that all refrigerants are recovered safely.

Prior to the task being carried out, an oil and refrigerant sample shall be taken in case analysis is required prior to re-use of recovered refrigerant. It is essential that electrical power is available before the task is commenced.

Continued to the next page

- a) Become familiar with the equipment and its operation.
- b) Isolate system electrically.
- c) Before attempting the procedure, ensure that:
 - mechanical handling equipment is available, if required, for handling refrigerant cylinders.
 - all personal protective equipment is available and being used correctly.
 - the recovery process is supervised at all times by a competent person.
 - recovery equipment and cylinders conform to the appropriate standards.
- d) Pump down refrigerant system, if possible.
- e) If a vacuum is not possible, make a manifold so that refrigerant can be removed from various parts of the system.
- f) Make sure that cylinder is situated on the scales before recovery takes place.
- g) Start the recovery machine and operate in accordance with instructions.
- h) Do not overfill cylinders. (no more than 80 % volume liquid charge)
- i) Do not exceed the maximum working pressure of the cylinder, even temporarily.
- j) When the cylinders have been filled correctly and the process completed, make sure that the cylinders and the equipment are removed from site promptly and all isolation valves on the equipment are closed off.
- k) Recovered refrigerant shall not be charged into another REFRIGERATING SYSTEM unless it has been cleaned and checked.

(9) Labelling

Equipment shall be labelled stating that it has been de-commissioned and emptied of refrigerant.

The label shall be dated and signed. For appliances containing FLAMMABLE REFRIGERANTS, ensure that there are labels on the equipment stating the equipment contains FLAMMABLE REFRIGERANT.

(10) Recovery

When removing refrigerant from a system, either for servicing or decommissioning, it is recommended good practice that all refrigerants are removed safely.

When transferring refrigerant into cylinders, ensure that only appropriate refrigerant recovery cylinders are employed. Ensure that the correct number of cylinders for holding the total system charge is available.

All cylinders to be used are designated for the recovered refrigerant and labelled for that refrigerant (i.e. special cylinders for the recovery of refrigerant). Cylinders shall be complete with pressure-relief valve and associated shutoff valves in good working order.

Empty recovery cylinders are evacuated and, if possible, cooled before recovery occurs.

The recovery equipment shall be in good working order with a set of instructions concerning the equipment that is at hand and shall be suitable for the recovery of the flammable refrigerant.

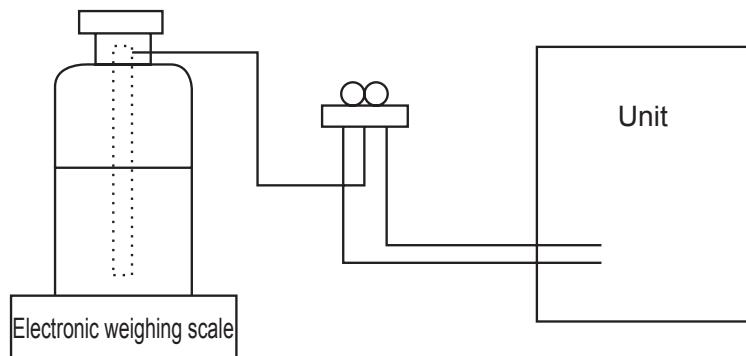
If in doubt, the manufacturer should be consulted. In addition, a set of calibrated weighing scales shall be available and in good working order. Hoses shall be complete with leak-free disconnect couplings and in good condition.

The recovered refrigerant shall be processed according to local legislation in the correct recovery cylinder, and the relevant waste transfer note arranged. Do not mix refrigerants in recovery units and especially not in cylinders.

If compressors or compressor oils are to be removed, ensure that they have been evacuated to an acceptable level to make certain that flammable refrigerant does not remain within the lubricant.

The compressor body shall not be heated by an open flame or other ignition sources to accelerate this process.

When oil is drained from a system, it shall be carried out safely.



[5] Service tools

Use the below service tools as exclusive tools for R454B refrigerant.

No.	Tool name	Specifications
①	Gauge manifold	<ul style="list-style-type: none"> · Only for R454B · Use the existing fitting specifications. (UNF1/2) · Use high-tension side pressure of 768.7 PSIG [5.3 MPa.G] or over.
②	Charge hose	<ul style="list-style-type: none"> · Only for R454B · Use pressure performance of 738.2 PSIG [5.09 MPa.G] or over.
③	Electronic weighing scale	—
④	Gas leak detector	<ul style="list-style-type: none"> · Use the detector for R454B.
⑤	Adaptor for reverse flow check	<ul style="list-style-type: none"> · Attach on vacuum pump.
⑥	Refrigerant charge base	—
⑦	Refrigerant cylinder	<ul style="list-style-type: none"> · Only for R454B · Cylinder with syphon
⑧	Refrigerant recovery equipment	—

3

PART NAMES AND FUNCTIONS

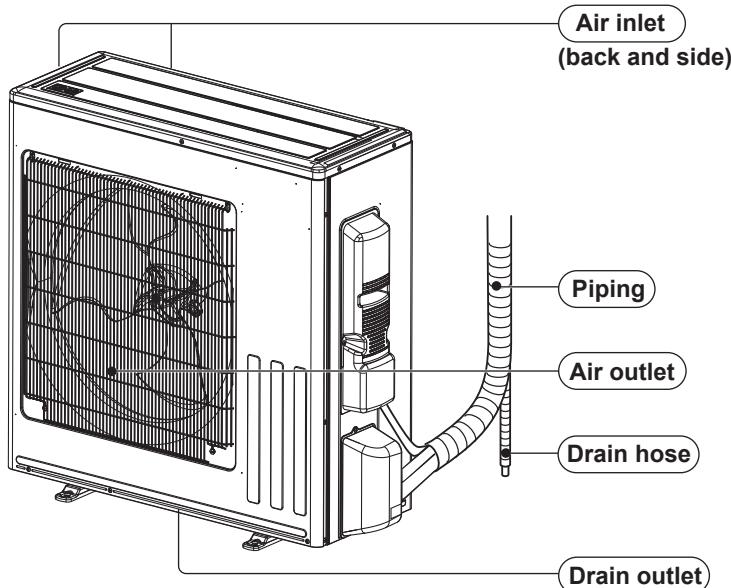
SUZ-AA18NL(H)-U1
SUZ-AA09NLHZ-U1

SUZ-AA24NL(H)-U1
SUZ-AA12NLHZ-U1

SUZ-AA30NL(H)-U1
SUZ-AA15NLHZ-U1

SUZ-AA36NL(H)-U1
SUZ-AA18NLHZ-U1

OUTDOOR UNIT



Outdoor unit model			SUZ-AA18NL(H)	SUZ-AA24NL(H)	SUZ-AA30NL(H)	SUZ-AA36NL(H)			
Power supply			V , phase , Hz						
Max. fuse size (time delay)			A	42	40	41			
Min. circuit ampacity			A	25	24	25			
Fan motor			A	0.5					
Compressor	Model		SRB172FQHMT	SRB220FQYMT					
	Refrigeration oil	fl oz. (L) (Model)	14.5 (0.43)/ (RM68EH)	15.6 (0.46)/ (RM68EH)					
Refrigerant control			Linear expansion valve						
Sound level*1	Cooling	dB(A)	54	55					
	Heating	dB(A)		55					
Air flow High - Med. - Low	Cooling	CFM	2193-2193-1097	1974-1974-1097					
	Heating	CFM		1949 - 1949 - 1364					
Fan speed High - Med. - Low	Cooling	rpm	900-900-450	810-810-450					
	Heating	rpm		800-800-560					
Defrost method			Reverse cycle						
Dimensions	W	in.	33-1/16						
	D	in.	13						
	H	in.	34-5/8						
Weight		lb.	115	117					
External finish			Munsell 3Y 7.8/1.1						
Control voltage (by built-in transformer)		V DC	12 - 24						
Refrigerant piping			Not supplied						
Refrigerant pipe size (Min. wall thickness)	Liquid	in.	1/4 (0.0315)						
	Gas	in.	1/2 (0.0285)	5/8 (0.0315)					
Connection method	Indoor		Flared						
	Outdoor		Flared						
Between the indoor & outdoor units	Height difference	ft.	50	100					
	Piping length	ft.		100					
Refrigerant charge (R454B)			2 lb. 16 oz.	3 lb. 4 oz.					

Note: Test conditions are based on AHRI 210/240.

Rating conditions (Cooling) — Indoor: 80°F D.B., 67°F W.B., Outdoor: 95°F D.B., (75°F W.B.)

(Heating) — Indoor: 70°F D.B., 60°F W.B., Outdoor: 47°F D.B., 43°F W.B.

OPERATING RANGE

(1) POWER SUPPLY

	Rated voltage	Guaranteed voltage (V)
Outdoor unit	208/230 V 1 phase 60 Hz	Min. 187 208 230 Max. 253



Outdoor unit model			SUZ-AA09NLHZ	SUZ-AA12NLHZ	SUZ-AA15NLHZ	SUZ-AA18NLHZ					
Power supply			V , phase , Hz								
Max. fuse size (time delay)			A	41	42						
Min. circuit ampacity			A	24	25						
Fan motor			A	0.5							
Compressor	Model		SRB172FQHMT								
	Refrigeration oil	fl oz. (L) (Model)	14.5 (0.43)/ (RM68EH)								
Refrigerant control			Linear expansion valve								
Sound level*1	Cooling	dB(A)	54		55						
	Heating	dB(A)	55								
Air flow High - Med. - Low	Cooling	CFM	2193-2193-1097								
	Heating	CFM	1949 - 1949 - 1364								
Fan speed High - Med. - Low	Cooling	rpm	900-900-450								
	Heating	rpm	800-800-560								
Defrost method			Reverse cycle								
Dimensions	W	in.	33-1/16								
	D	in.	13								
	H	in.	34-5/8								
Weight			115								
External finish			Munsell 3Y 7.8/1.1								
Control voltage (by built-in transformer)			12-24								
Refrigerant piping			Not supplied								
Refrigerant pipe size (Min. wall thickness)	Liquid	in.	1/4 (0.0315)								
	Gas	in.	3/8 (0.0315)	1/2 (0.0285)							
Connection method	Indoor		Flared								
	Outdoor		Flared								
Between the indoor & outdoor units	Height difference	ft.	50								
	Piping length	ft.	100								
Refrigerant charge (R454B)			2 lb. 16 oz.								

Note: Test conditions are based on AHRI 210/240.

Rating conditions (Cooling) — Indoor: 80°F D.B., 67°F W.B., Outdoor: 95°F D.B., (75°F W.B.)

(Heating) — Indoor: 70°F D.B., 60°F W.B., Outdoor: 47°F D.B., 43°F W.B.

OPERATING RANGE

(1) POWER SUPPLY

	Rated voltage	Guaranteed voltage (V)
Outdoor unit	208/230 V 1 phase 60 Hz	Min. 187 208 230 Max. 253 -----+-----+-----+-----+

OUTLINES AND DIMENSIONS

SUZ-AA18NL(H)-U1
SUZ-AA09NLHZ-U1

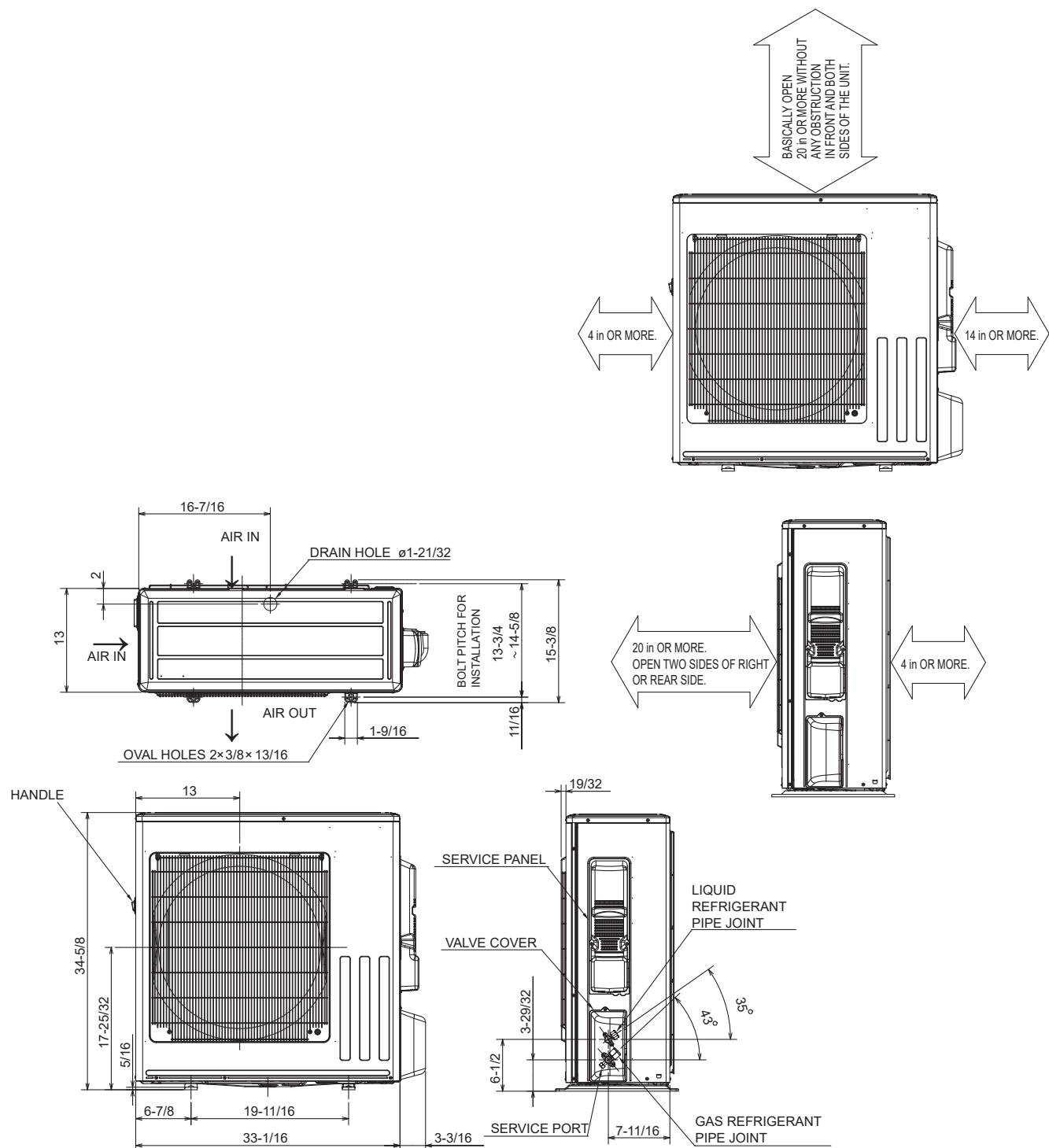
SUZ-AA24NL(H)-U1
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SUZ-AA30NL(H)-U1
SUZ-AA15NLHZ-U1

SUZ-AA36NL(H)-U1
SUZ-AA18NLHZ-U1

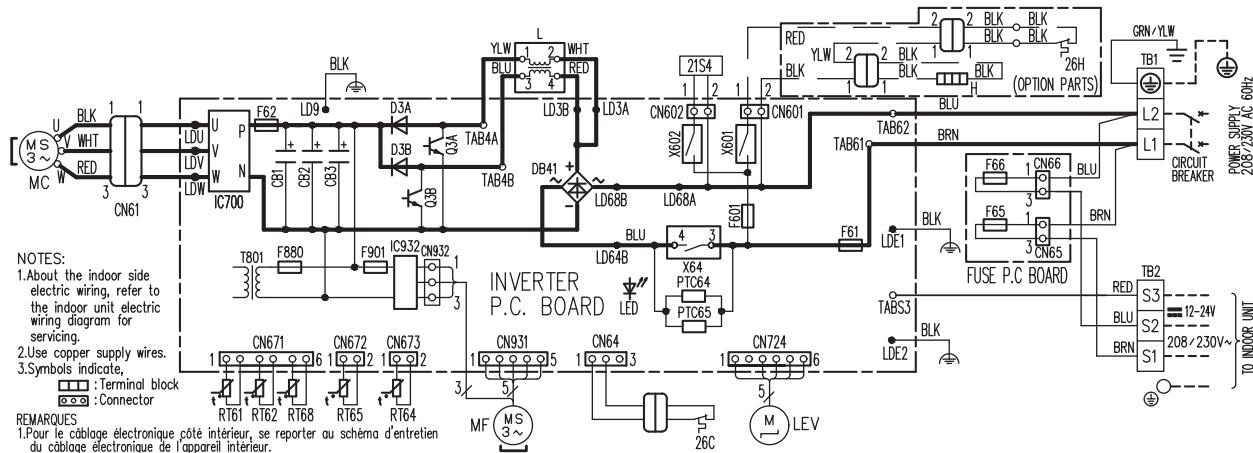
Unit: inch

REQUIRED SPACE



REFRIGERANT PIPE JOINT	LIQUID REFRIGERANT PIPE	FLARED ø6.35 (1/4")
GAS REFRIGERANT PIPE	AA09/12 : FLARED ø9.52 (3/8") AA15/18 : FLARED ø12.7 (1/2") AA24/30/36 : FLARED ø15.88 (5/8")	

SUZ-AA18NL-U1

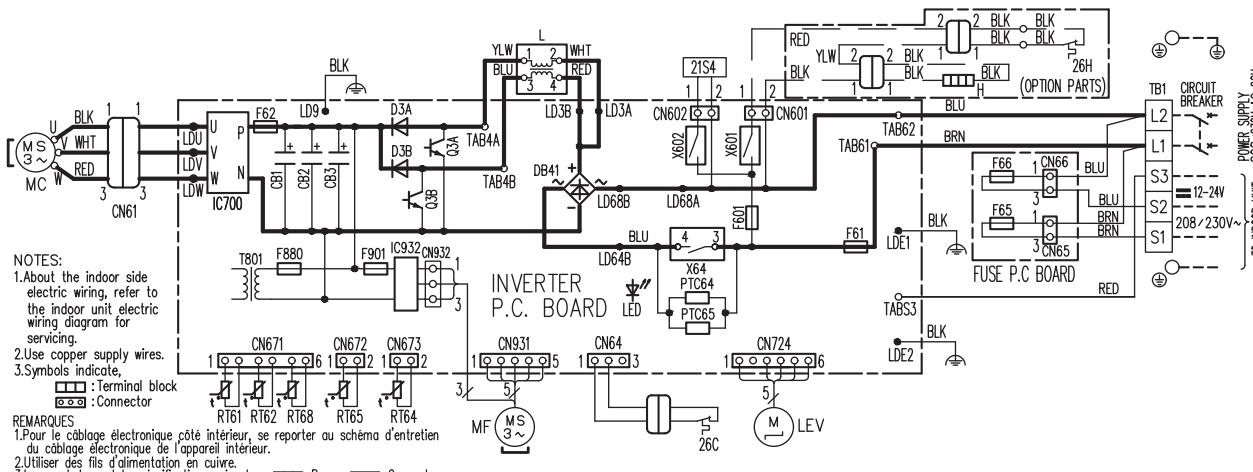


SYMBOL	NAME	SYMBOL	NAME	SYMBOL	NAME
CB1,CB2,CB3	SMOOTHING CAPACITOR	L	REACTOR	RT65	AMBIENT TEMP. THERMISTOR
CN61	CONNECTOR	LED	LED	RT68	OUTDOOR HEAT EXCHANGER TEMP. THERMISTOR
DB41	DIODE MODULE	LEV	EXPANSION VALVE COIL	TB1,TB2	TERMINAL BLOCK
D3A,D3B	DIODE	MC	COMPRESSOR	T801	TRANSFORMER
F61	FUSE (25A 250V)	MF	FAN MOTOR	X64,X601,X602	RELAY
F62	FUSE (15A 250V)	PTC64,PTC65	CIRCUIT PROTECTION	21S4	REVERSING VALVE COIL
F65,F66	FUSE (T6.3AL250V)	Q3A,Q3B	SWITCHING POWER TRANSISTOR	26C	COMPRESSOR PROTECTOR
F601,F880,F901	FUSE (T3.15AL250V)	RT61	DEFROST TEMP. THERMISTOR	26H	HEATER PROTECTOR(OPTIONPARTS)
H	DEFROST HEATER	RT62	DISCHARGE TEMP. THERMISTOR		
IC700,IC932	POWER MODULE	RT64	FIN TEMP. THERMISTOR		

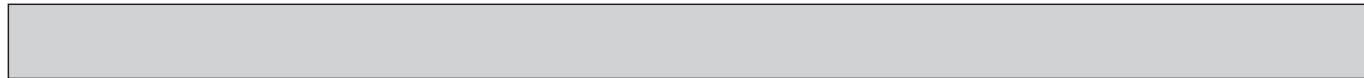
SUZ-AA24NL-U1

SUZ-AA30NL-U1

SUZ-AA36NL-U1



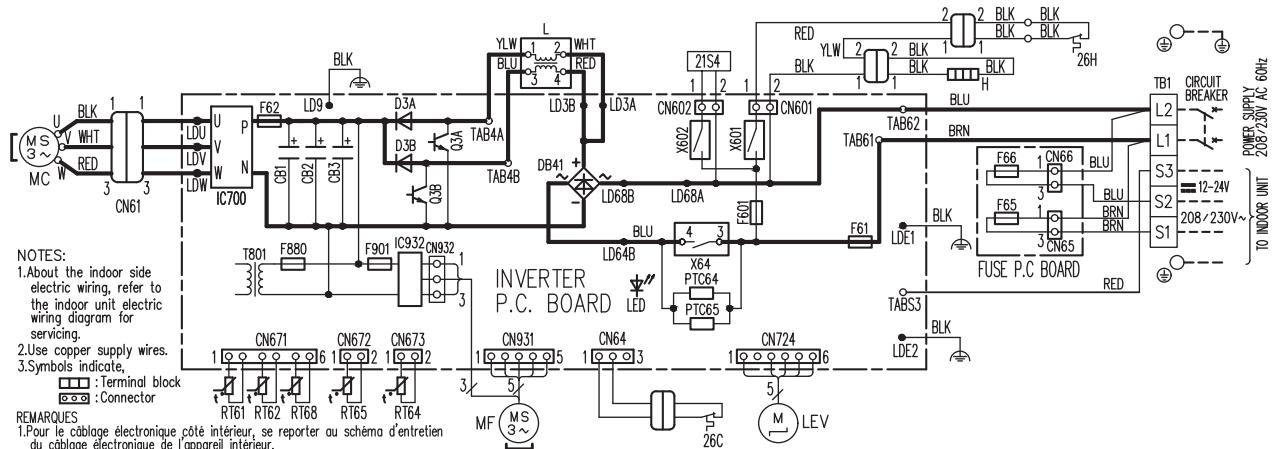
SYMBOL	NAME	SYMBOL	NAME	SYMBOL	NAME
CB1,CB2,CB3	SMOOTHING CAPACITOR	L	REACTOR	RT65	AMBIENT TEMP. THERMISTOR
CN61	CONNECTOR	LED	LED	RT68	OUTDOOR HEAT EXCHANGER TEMP. THERMISTOR
DB41	DIODE MODULE	LEV	EXPANSION VALVE COIL	TB1	TERMINAL BLOCK
D3A,D3B	DIODE	MC	COMPRESSOR	T801	TRANSFORMER
F61	FUSE (25A 250V)	MF	FAN MOTOR	X64,X601,X602	RELAY
F62	FUSE (15A 250V)	PTC64,PTC65	CIRCUIT PROTECTION	21S4	REVERSING VALVE COIL
F65,F66	FUSE (T6.3AL250V)	Q3A,Q3B	SWITCHING POWER TRANSISTOR	26C	COMPRESSOR PROTECTOR
F601,F880,F901	FUSE (T3.15AL250V)	RT61	DEFROST TEMP. THERMISTOR	26H	HEATER PROTECTOR(OPTIONPARTS)
H	DEFROST HEATER	RT62	DISCHARGE TEMP. THERMISTOR		
IC700,IC932	POWER MODULE	RT64	FIN TEMP. THERMISTOR		



SUZ-AA24NLH-U1

SUZ-AA30NLH-U1

SUZ-AA36NLH-U1



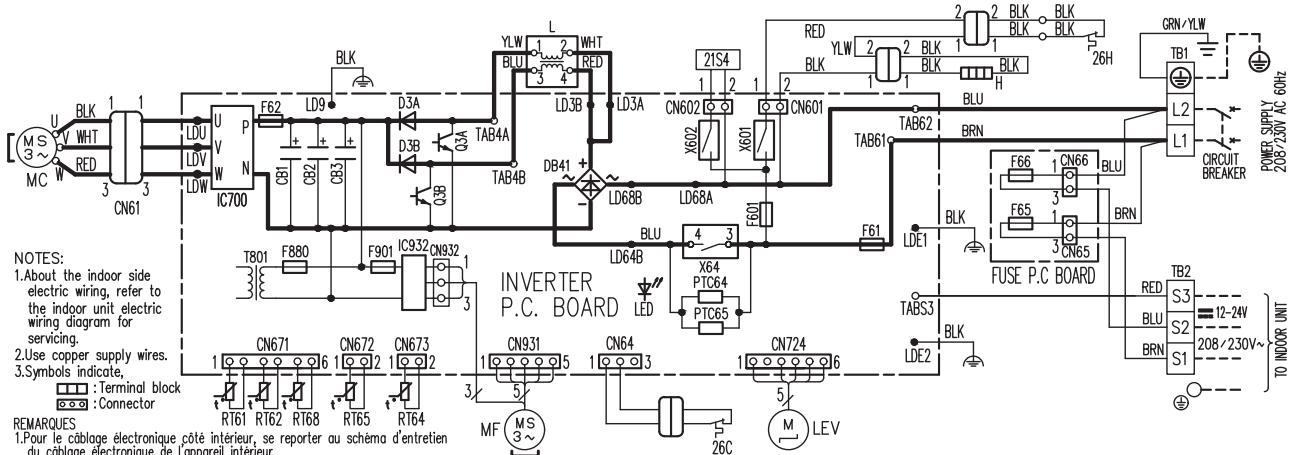
SYMBOL	NAME	SYMBOL	NAME	SYMBOL	NAME
CB1,CB2,CB3	SMOOTHING CAPACITOR	L	REACTOR	RT65	AMBIENT TEMP. THERMISTOR
CN61	CONNECTOR	LED	LED	RT68	OUTDOOR HEAT EXCHANGER TEMP. THERMISTOR
DB41	DIODE MODULE	LEV	EXPANSION VALVE COIL	TB1	TERMINAL BLOCK
D3A,D3B	DIODE	MC	COMPRESSOR	T801	TRANSFORMER
F61	FUSE (25A 250V)	MF	FAN MOTOR	X64,X601,X602	RELAY
F62	FUSE (15A 250V)	PTC64,PTC65	CIRCUIT PROTECTION	21S4	REVERSING VALVE COIL
F65,F66	FUSE (T6.3AL250V)	Q3A,Q3B	SWITCHING POWER TRANSISTOR	CN602	COMPRESSOR PROTECTOR
F601,F880,F901	FUSE (T3.15AL250V)	RT61	DEFROST TEMP. THERMISTOR	CN601	HEATER PROTECTOR
H	DEFROST HEATER	RT62	DISCHARGE TEMP. THERMISTOR	TAB61	
IC700,IC932	POWER MODULE	RT64	FIN TEMP. THERMISTOR	26H	

**SUZ-AA09NLHZ-U1
SUZ-AA18NLH-U1**

SUZ-AA12NLHZ-U1

SUZ-AA15NLHZ-U1

SUZ-AA18NLHZ-U1

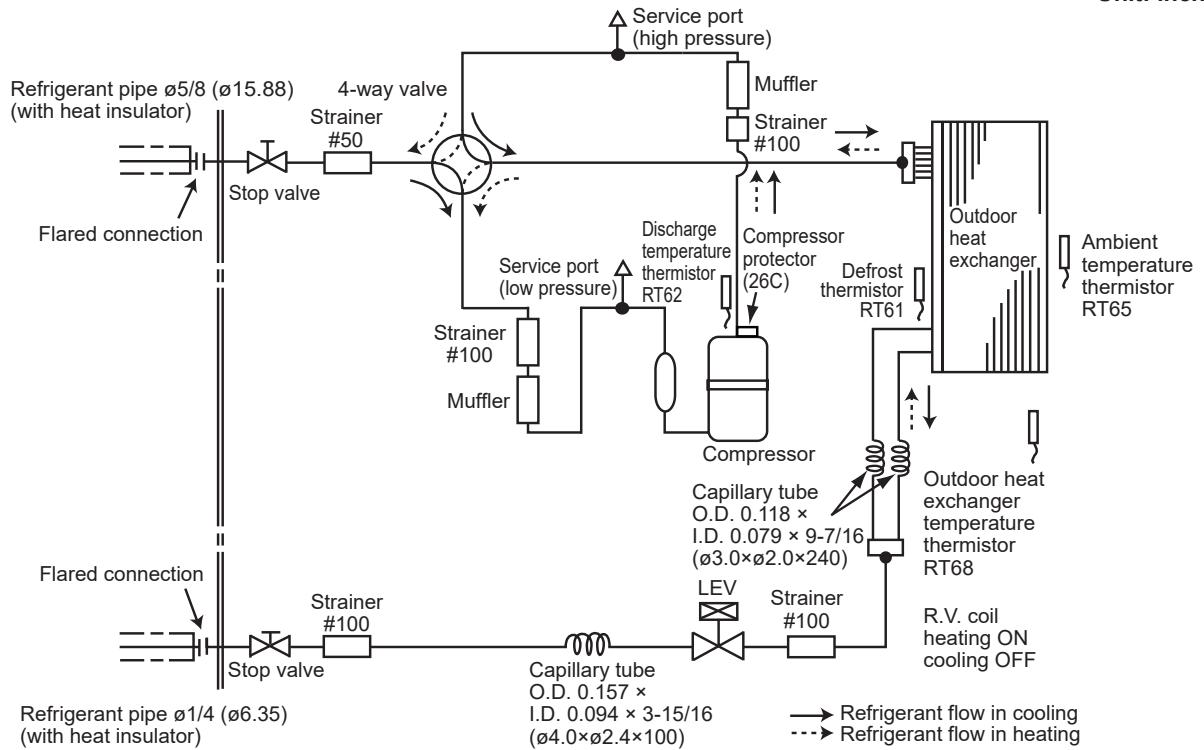


SYMBOL	NAME	SYMBOL	NAME	SYMBOL	NAME
CB1,CB2,CB3	SMOOTHING CAPACITOR	L	REACTOR	RT65	AMBIENT TEMP. THERMISTOR
CN61	CONNECTOR	LED	LED	RT68	OUTDOOR HEAT EXCHANGER TEMP. THERMISTOR
DB41	DIODE MODULE	LEV	EXPANSION VALVE COIL	TB1,TB2	TERMINAL BLOCK
D3A,D3B	DIODE	MC	COMPRESSOR	T801	TRANSFORMER
F61	FUSE (25A 250V)	MF	FAN MOTOR	X64,X601,X602	RELAY
F62	FUSE (15A 250V)	PTC64,PTC65	CIRCUIT PROTECTION	21S4	REVERSING VALVE COIL
F65,F66	FUSE (T6.3AL250V)	Q3A,Q3B	SWITCHING POWER TRANSISTOR	CN602	COMPRESSOR PROTECTOR
F601,F880,F901	FUSE (T3.15AL250V)	RT61	DEFROST TEMP. THERMISTOR	CN601	HEATER PROTECTOR
H	DEFROST HEATER	RT62	DISCHARGE TEMP. THERMISTOR	TAB61	
IC700,IC932	POWER MODULE	RT64	FIN TEMP. THERMISTOR	26H	

REFRIGERANT SYSTEM DIAGRAM

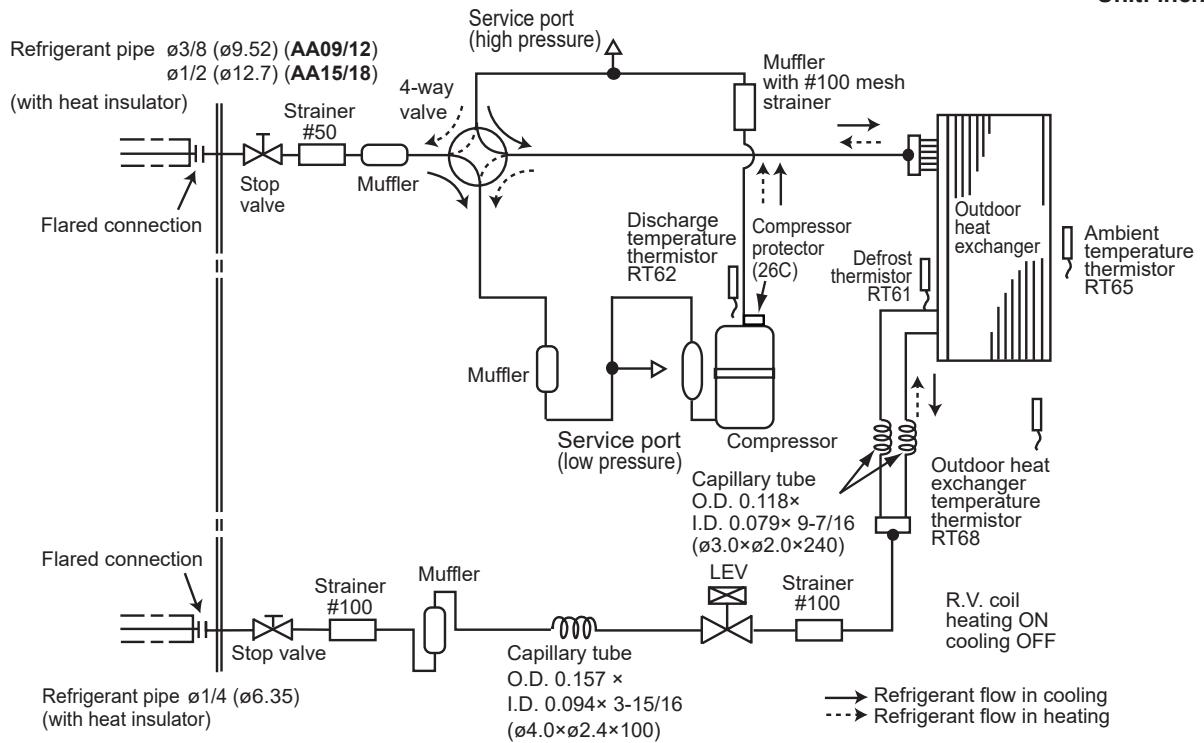
SUZ-AA24NL(H)-U1 SUZ-AA30NL(H)-U1 SUZ-AA36NL(H)-U1

Unit: inch (mm)



SUZ-AA09NLHZ-U1 SUZ-AA12NLHZ-U1 SUZ-AA18NLHZ-U1 SUZ-AA18NL(H)-U1

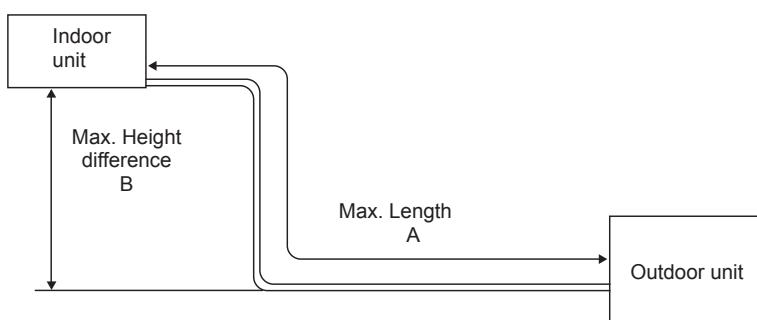
Unit: inch (mm)





MAX. REFRIGERANT PIPING LENGTH and MAX. HEIGHT DIFFERENCE

Model	Refrigerant piping: ft.		Piping size O.D: in.	
	Max. Length A	Max. Height difference B	Gas	Liquid
SUZ-AA09/12NLHZ	100	50	3/8	1/4
SUZ-AA15/18NLHZ SUZ-AA18NL(H)		50	1/2	1/4
SUZ-AA24/30/36NL(H)		100	5/8	1/4



ADDITIONAL REFRIGERANT CHARGE (R454B: oz.)

NOTE: Refrigerant piping exceeding 25 ft. requires additional refrigerant charge according to the calculation.

Model	Outdoor unit precharged	Refrigerant piping length (one way): ft.								
		25	30	40	50	60	70	80	90	100
SUZ-AA09/12/15/18NLHZ SUZ-AA18NL(H)	2 lb. 16 oz.	0	1.08	3.24	5.40	7.56	9.72	11.88	14.04	16.20

Calculation: X oz. = 1.08/5 oz./ft. × (Refrigerant piping length (ft.) - 25)

Model	Outdoor unit precharged	Refrigerant piping length (one way): ft.								
		25	30	40	50	60	70	80	90	100
SUZ-AA24/30/36NL(H)	3 lb. 4 oz.	0	1.08	3.24	5.40	7.56	9.72	11.88	14.04	16.20

Calculation: X oz. = 1.08/5 oz./ft. × (Refrigerant piping length (ft.) - 25)

STANDARD OPERATION DATA

Representative matching		SLZ-AF09NL		SLZ-AF12NL		SLZ-AF15NL		SLZ-AF18NL		SLZ-AF18NL			
Item		Unit	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	
Total	Capacity	W	9000	12000	12000	15000	15000	17000	18000	20000	18000	20000	
	SHF	-	0.88	-	0.80	-	0.75	-	0.70	-	0.70	-	
	Input	kW	720	1020.00	860.00	1290	1180	1500	1500	1880	1500	1880	
Electrical circuit	Indoor unit		SLZ-AF09NL		SLZ-AF12NL		SLZ-AF15NL		SLZ-AF18NL		SLZ-AF18NL		
	Phase, Hz		1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	
	Volts		208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230	
	Current	A	0.20	0.15	0.24	0.19	0.32	0.27	0.43	0.38	0.43	0.38	
	Outdoor unit model		SUZ-AA09NLHZ		SUZ-AA12NLHZ		SUZ-AA15NLHZ		SUZ-AA18NLHZ		SUZ-AA18NL(H)		
	Phase, Hz		1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	
	Volts		208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230	
	Current	A	2.9/2.6	4.5/4.1	3.9/3.5	5.7/5.1	5.2/4.7	7.3/6.5	6.8/6.1	8.6/7.8	6.8/6.1	8.6/7.8	
Refrigerant circuit	Condensing pressure		PSIG	299	363	306	388	319	411	332	444	332	444
	Suction pressure		PSIG	145	108	140	104	126	103	113	102	113	102
	Discharge temperature		°F	143	149	142	158	153	179	161	191	161	191
	Condensing temperature		°F	100	108	102	112	103	117	107	127	107	127
	Suction temperature		°F	57	41	55	39	49	38	46	38	46	38
	Ref. pipe length		ft.	25		25		25		25		25	
	Refrigerant charge (R454B)		-	2 lb. 16 oz.		2 lb. 16 oz.							
Indoor unit	Intake air temperature	DB	°F	80	70	80	70	80	70	80	70	80	70
		WB	°F	67	60	67	60	67	60	67	60	67	60
Outdoor unit	Discharge air temperature	DB	°F	59	102	58	105	55	108	56	110	56	110
		WB	°F	58	71	57	71	54	72	54	73	54	73
Outdoor unit	Intake air temperature	DB	°F	95	47	95	47	95	47	95	47	95	47
		WB	°F	75	43	75	43	75	43	75	43	75	43

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Representative matching			SEZ-AE09NL		SEZ-AE12NL		SEZ-AE15NL		SEZ-AE18NL		SEZ-AE18NL	
Item		Unit	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating
Total	Capacity	W	9000	12000	12000	15000	15000	18000	18000	20000	18000	20000
	SHF	-	0.80	-	0.84	-	0.88	-	0.83	-	0.83	-
	Input	kW	800	1150.00	920.00	1210	1220	1420	1450	1550	1450	1550
Electrical circuit	Indoor unit			SEZ-AE09NL		SEZ-AE12NL		SEZ-AE15NL		SEZ-AE18NL		SEZ-AE18NL
	Phase, Hz			1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	1, 60
	Volts			208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230
	Current	A	0.50	0.39	0.57	0.46	0.74	0.63	0.74	0.63	0.74	0.63
	Outdoor unit model			SUZ-AA09NLHZ	SUZ-AA12NLHZ	SUZ-AA15NLHZ	SUZ-AA18NLHZ	SUZ-AA18NL(H)				
	Phase, Hz			1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	1, 60
	Volts			208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230
Refrigerant circuit	Current	A	3.2/2.9	5.0/4.5	3.3/3.0	5.4/4.8	4.6/4.1	6.4/5.7	5.6/5.0	6.8/6.1	5.6/5.0	6.8/6.1
	Condensing pressure		PSIG	306	423	307	351	319	345	329	338	329
	Suction pressure		PSIG	120	111	142	104	138	101	137	99	137
	Discharge temperature		°F	146	167	142	147	150	157	152	156	152
	Condensing temperature		°F	101	123	102	105	103	104	105	102	105
	Suction temperature		°F	52	41	56	39	54	37	53	36	53
	Ref. pipe length		ft.	25		25		25		25		25
Outdoor unit	Refrigerant charge (R454B)		-	2 lb. 16 oz.		2 lb. 16 oz.		2 lb. 16 oz.		2 lb. 16 oz.		2 lb. 16 oz.
	Intake air temperature	DB	°F	80	70	80	70	80	70	80	70	80
		WB	°F	67	60	67	60	67	60	67	60	67
	Discharge air temperature	DB	°F	60	105	57	104	58	100	58	100	58
		WB	°F	58	71	57	71	58	70	58	70	58
	Intake air temperature	DB	°F	95	47	95	47	95	47	95	47	95
		WB	°F	75	43	75	43	75	43	75	43	75

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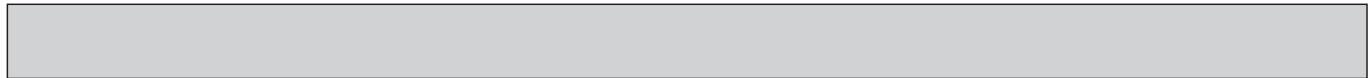
Representative matching			PEAD-AA09NL		PEAD-AA12NL		PEAD-AA15NL		PEAD-AA18NL		PEAD-AA18NL		
Item		Unit	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	
Total	Capacity	W	9000	12000	12000	15000	15000	18000	18000	20000	18000	20000	
	SHF	-	0.93	-	0.87	-	0.88	-	0.82	-	0.82	-	
	Input	kW	750	1010.00	880.00	1200	1150	1290	1410	1510	1410	1510	
Electrical circuit	Indoor unit			PEAD-AA09NL		PEAD-AA12NL		PEAD-AA15NL		PEAD-AA18NL		PEAD-AA18NL	
	Phase, Hz			1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	
	Volts			208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230	
	Current	A	0.39	0.39	0.50	0.50	0.72	0.72	0.72	0.72	0.72	0.72	
	Outdoor unit model			SUZ-AA09NLHZ		SUZ-AA12NLHZ		SUZ-AA15NLHZ		SUZ-AA18NLHZ		SUZ-AA18NL(H)	
	Phase, Hz			1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	
	Volts			208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230	
	Current	A	2.7/2.4	4.0/3.6	3.6/3.2	5.1/4.5	4.4/3.9	5.8/5.2	5.8/5.1	6.7/6.0	5.8/5.1	6.7/6.0	
Refrigerant circuit	Condensing pressure		PSIG	298	349	306	356	319	326	328	343	328	343
	Suction pressure		PSIG	148	108	144	104	140	101	132	99	132	99
	Discharge temperature		°F	143	145	141	148	150	151	154	158	154	158
	Condensing temperature		°F	100	105	102	106	103	100	51	103	105	103
	Suction temperature		°F	58	41	57	39	55	37	#REF!	36	51	36
	Ref. pipe length		ft.	25		25		25		25		25	
	Refrigerant charge (R454B)			-	2 lb. 16 oz.								
Indoor unit	Intake air temperature	DB	°F	80	70	80	70	80	70	80	70	80	70
		WB	°F	67	60	67	60	67	60	67	60	67	60
	Discharge air temperature	DB	°F	59	102	59	100	58	99	56	103	56	103
		WB	°F	59	71	58	70	58	70	56	71	56	71
Outdoor unit	Intake air temperature	DB	°F	95	47	95	47	95	47	95	47	95	47
		WB	°F	75	43	75	43	75	43	75	43	75	43

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Representative matching			PEAD-AA24NL		PEAD-AA30NL		PEAD-AA36NL	
Item		Unit	Cooling	Heating	Cooling	Heating	Cooling	Heating
Total	Capacity	W	24000	25000	27000	30000	33000	34000
	SHF	-	0.79	-	0.82	-	0.85	-
	Input	kW	1900	2020.00	2270.00	2600	3070	2670
Electrical circuit	Indoor unit			PEAD-AA24NL	PEAD-AA30NL	PEAD-AA36NL		
	Phase, Hz			1, 60	1, 60	1, 60	1, 60	1, 60
	Volts			208/230	208/230	208/230	208/230	208/230
	Current	A	0.85	0.85	1.10	1.10	1.60	1.60
	Outdoor unit model			SUZ-AA24NL(H)	SUZ-AA30NL(H)	SUZ-AA36NL(H)		
	Phase, Hz			1, 60	1, 60	1, 60	1, 60	1, 60
	Volts			208/230	208/230	208/230	208/230	208/230
Refrigerant circuit	Current	A	8.3/7.4	9.3/8.3	10.0/8.9	11.8/10.5	12.2/10.9	11.0/9.8
	Condensing pressure		PSIG	348	348	359	358	381
	Suction pressure		PSIG	124	94	123	89	122
	Discharge temperature		°F	163	169	164	179	183
	Condensing temperature		°F	109	109	110	110	114
	Suction temperature		°F	53	38	49	37	56
	Ref. pipe length		ft.	25		25		25
Outdoor unit	Refrigerant charge (R454B)		-	3 lb. 4 oz.		3 lb. 4 oz.		3 lb. 4 oz.
	Indoor unit	Intake air temperature	DB	°F	80	70	80	70
		WB	°F	67	60	67	60	67
	Indoor unit	Discharge air temperature	DB	°F	55	103	56	103
		WB	°F	55	71	56	71	57
	Outdoor unit	Intake air temperature	DB	°F	95	47	95	47
		WB	°F	75	43	75	43	75

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Representative matching			SVZ-AP12NL		SVZ-AP18NL		SVZ-AP18NL		SVZ-AP24NL		SVZ-AP30NL		
Item		Unit	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	
Total	Capacity	W	12000	15000	18000	20000	18000	20000	22800	25000	27000	30000	
	SHF	-	0.89	-	0.83	-	0.83	-	0.73	-	0.77	-	
	Input	kW	950	1200.00	1490.00	1530	1490	1530	1930	2130	2400	2500	
Electrical circuit	Indoor unit		SVZ-AP12NL		SVZ-AP18NL		SVZ-AP18NL		SVZ-AP24NL		SVZ-AP30NL		
	Phase, Hz		1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	
	Volts		208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230	
	Current	A	0.90	0.81	1.44	1.29	1.44	1.29	1.60	1.40	2.00	1.70	
	Outdoor unit model		SUZ-AA12NLHZ		SUZ-AA18NLHZ		SUZ-AA18NL(H)		SUZ-AA24NL(H)		SUZ-AA30NL(H)		
	Phase, Hz		1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	
	Volts		208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230	
	Current	A	3.3/2.9	4.7/4.1	5.1/4.4	6.2/5.4	5.1/4.4	6.2/5.4	7.4/6.5	9.1/8.1	9.5/8.4	10.2/9.0	
Refrigerant circuit	Condensing pressure		PSIG	306	335	328	335	328	335	350	360	355	315
	Suction pressure		PSIG	145	104	135	99	135	99	122	95	129	87
	Discharge temperature		°F	141	142	153	154	153	154	168	177	165	164
	Condensing temperature		°F	102	102	105	100	105	100	57	110	110	101
	Suction temperature		°F	57	39	52	36	52	36	57	38	56	37
	Ref. pipe length		ft.	25		25		25		25		25	
	Refrigerant charge (R454B)		-	2 lb. 16 oz.		2 lb. 16 oz.		2 lb. 16 oz.		3 lb. 4 oz.		3 lb. 4 oz.	
Indoor unit	Intake air temperature	DB	°F	80	70	80	70	80	70	80	70	80	70
		WB	°F	67	60	67	60	67	60	67	60	67	60
	Discharge air temperature	DB	°F	58	101	58	97	58	97	57	106	56	102
		WB	°F	58	70	58	69	58	69	56	72	56	71
Outdoor unit	Intake air temperature	DB	°F	95	47	95	47	95	47	95	47	95	47
		WB	°F	75	43	75	43	75	43	75	43	75	43



Representative matching		SVZ-AP36NL		
Item		Unit	Cooling	Heating
Total	Capacity	W	33000	34200
	SHF	-	0.72	-
	Input	kW	3530	2810.00
Electrical circuit	Indoor unit		SVZ-AP36NL	
	Phase, Hz		1,60	1,60
	Volts		208/230	208/230
	Current	A	3.00	2.70
	Outdoor unit model		SUZ-AA36NL(H)	
	Phase, Hz		1, 60	1, 60
	Volts		208/230	208/230
	Current	A	13.2/11.6	10.8/9.5
Refrigerant circuit	Condensing pressure	PSIG	381	305
	Suction pressure	PSIG	112	81
	Discharge temperature	°F	189	167
	Condensing temperature	°F	114	94
	Suction temperature	°F	52	35
	Ref. pipe length	ft.	25	
	Refrigerant charge (R454B)	-	3 lb. 4 oz.	
Indoor unit	Intake air temperature	DB	°F	80
		WB	°F	67
	Discharge air temperature	DB	°F	54
		WB	°F	54
Outdoor unit	Intake air temperature	DB	°F	95
		WB	°F	75

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Representative matching			MLZ-KX09NL		MLZ-KX12NL		MLZ-KX18NL		MLZ-KX18NL		
Item		Unit	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	
Total	Capacity	W	9000	12000	12000	15000	16400	19000	16400	19000	
	SHF	-	0.81	-	0.73	-	0.71	-	0.71	-	
	Input	kW	730	1030.00	900.00	1330	1390	1750	1390	1750	
Electrical circuit	Indoor unit			MLZ-KX09NL		MLZ-KX12NL		MLZ-KX18NL		MLZ-KX18NL	
	Phase, Hz			1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	
	Volts			208/230	208/230	208/230	208/230	208/230	208/230	208/230	
	Current	A	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	
	Outdoor unit model			SUZ-AA09NLHZ		SUZ-AA12NLHZ		SUZ-AA18NLHZ		SUZ-AA18NL(H)	
	Phase, Hz			1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	
	Volts			208/230	208/230	208/230	208/230	208/230	208/230	208/230	
	Current	A	3.1/2.8	4.2/3.8	4.2/3.8	5.2/4.6	6.3/5.7	7.8/7.0	6.3/5.7	7.8/7.0	
Refrigerant circuit	Condensing pressure		PSIG	299	369	307	409	324	426	324	426
	Suction pressure		PSIG	139	108	129	104	114	100	114	100
	Discharge temperature		°F	143	151	144	164	165	185	165	185
	Condensing temperature		°F	100	109	102	112	104	120	104	120
	Suction temperature		°F	55	41	51	39	49	37	49	37
	Ref. pipe length		ft.	25		25		25		25	
	Refrigerant charge (R454B)			-	2 lb. 16 oz.		2 lb. 16 oz.		2 lb. 16 oz.		
Indoor unit	Intake air temperature	DB	°F	80	70	80	70	80	70	80	70
		WB	°F	67	60	67	60	67	60	67	60
	Discharge air temperature	DB	°F	55	111	52	118	51	116	51	116
		WB	°F	55	73	52	75	51	75	51	75
Outdoor unit	Intake air temperature	DB	°F	95	47	95	47	95	47	95	47
		WB	°F	75	43	75	43	75	43	75	43

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Representative matching			MSZ-EX09NL(B/S/W)		MSZ-EX12NL(B/S/W)		MSZ-EX15NL(B/S/W)		MSZ-EX18NL(B/S/W)		MSZ-EX18NL(B/S/W)		
Item		Unit	Cooling	Heating									
Total	Capacity	W	9000	12000	12000	15000	15000	17000	16400	20000	16400	20000	
	SHF	-	0.96	-	0.82	-	0.73	-	0.69	-	0.69	-	
	Input	kW	710	900.00	850.00	1150	1260	1330	1390	1700	1390	1700	
Electrical circuit	Indoor unit			MSZ-EX09NL(B/S/W)		MSZ-EX12NL(B/S/W)		MSZ-EX15NL(B/S/W)		MSZ-EX18NL(B/S/W)		MSZ-EX18NL(B/S/W)	
	Phase, Hz			1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	
	Volts			208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230	
	Current	A	2.65	3.78	3.65	4.66	5.12	6.08	6.12	7.01	6.12	7.01	
	Outdoor unit model			SUZ-AA09NLHZ		SUZ-AA12NLHZ		SUZ-AA15NLHZ		SUZ-AA18NLHZ		SUZ-AA18NL(H)	
	Phase, Hz			1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	
	Volts			208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230	
Refrigerant circuit	Current	A	2.7/2.4	4.0/3.6	3.8/3.4	4.9/4.4	5.3/4.8	6.4/5.7	6.4/5.8	7.4/6.7	6.4/5.8	7.4/6.7	
	Condensing pressure		PSIG	298	322	306	351	320	372	324	401	324	
	Suction pressure		PSIG	149	108	140	104	116	102	114	99	114	
	Discharge temperature		°F	142	137	142	147	156	166	165	178	165	
	Condensing temperature		°F	100	98	102	104	104	109	104	114	104	
	Suction temperature		°F	59	41	55	39	45	38	49	36	49	
	Ref. pipe length		ft.	25		25		25		25		25	
Outdoor unit	Refrigerant charge (R454B)		-	2 lb. 16 oz.		2 lb. 16 oz.							
	Intake air temperature	DB	°F	80	70	80	70	80	70	80	70	80	70
		WB	°F	67	60	67	60	67	60	67	60	67	60
	Discharge air temperature	DB	°F	60	94	57	102	52	105	52	111	52	111
		WB	°F	59	68	56	71	52	72	52	73	52	73
	Intake air temperature	DB	°F	95	47	95	47	95	47	95	47	95	47
		WB	°F	75	43	75	43	75	43	75	43	75	43

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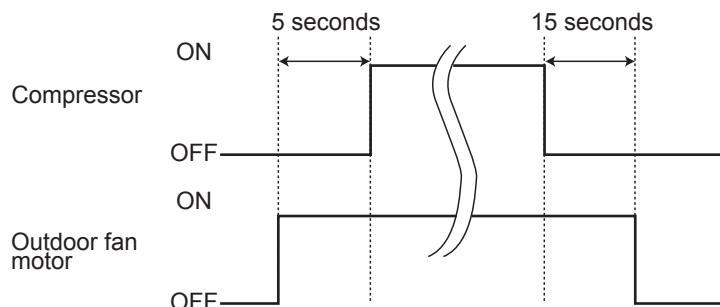
Representative matching			MFZ-KX09NL		MFZ-KX12NL		MFZ-KX15NL		MFZ-KX18NL		MFZ-KX18NL		
Item		Unit	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	
Total	Capacity	W	9000	12000	12000	15000	15000	17000	18000	20000	18000	20000	
	SHF	-	0.96	-	0.82	-	0.78	-	0.75	-	0.75	-	
	Input	kW	720	910.00	860.00	1170	1170	1270	1450	1690	1450	1690	
Electrical circuit	Indoor unit			MFZ-KX09NL		MFZ-KX12NL		MFZ-KX15NL		MFZ-KX18NL		MFZ-KX18NL	
	Phase, Hz			1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	
	Volts			208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230	
	Current	A	0.14	0.14	0.14	0.14	0.17	0.17	0.17	0.17	0.17	0.17	
	Outdoor unit model			SUZ-AA09NLHZ	SUZ-AA12NLHZ	SUZ-AA15NLHZ	SUZ-AA18NLHZ	SUZ-AA18NL(H)					
	Phase, Hz			1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	1, 60	
	Volts			208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230	
	Current	A	2.7/2.5	3.9/3.5	4/3.6	5.2/4.7	5.2/4.7	6.4/5.8	6.8/6.2	7.3/6.6	6.8/6.2	7.3/6.6	
Refrigerant circuit	Condensing pressure		PSIG	299	322	306	360	320	349	330	387	330	387
	Suction pressure		PSIG	149	108	140	104	131	102	126	99	126	99
	Discharge temperature		°F	143	137	142	150	152	158	156	173	156	173
	Condensing temperature		°F	59	99	102	105	104	105	105	112	105	112
	Suction temperature		°F	100	41	55	40	51	38	49	36	49	36
	Ref. pipe length		ft.	25		25		25		25		25	
	Refrigerant charge (R454B)		-	2 lb. 16 oz.		2 lb. 16 oz.		2 lb. 16 oz.		2 lb. 16 oz.		2 lb. 16 oz.	
Indoor unit	Intake air temperature	DB	°F	80	70	80	70	80	70	80	70	80	70
		WB	°F	67	60	67	60	67	60	67	60	67	60
	Discharge air temperature	DB	°F	59	100	56	107	54	103	53	110	53	110
		WB	°F	59	70	56	72	54	71	53	73	53	73
Outdoor unit	Intake air temperature	DB	°F	95	47	95	47	95	47	95	47	95	47
		WB	°F	75	43	75	43	75	43	75	43	75	43

9-1. OUTDOOR FAN MOTOR CONTROL

The fan motor turns ON/OFF, interlocking with the compressor.

[ON] The fan motor turns ON 5 seconds before the compressor starts up.

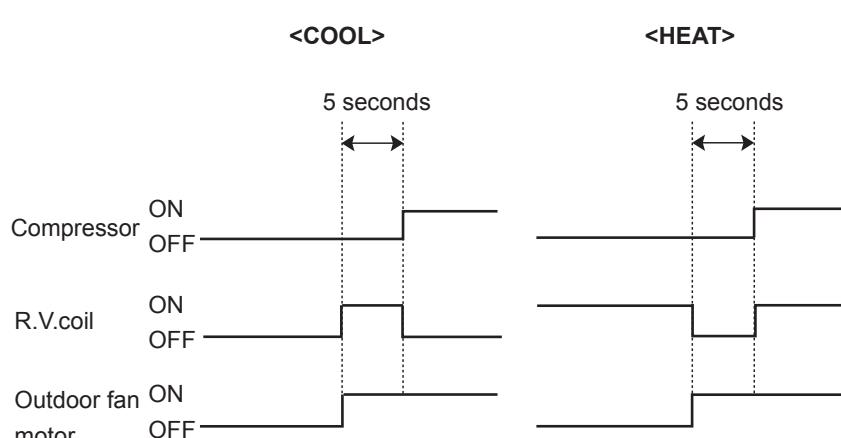
[OFF] The fan motor turns OFF 15 seconds after the compressor has stopped running.



9-2. R.V. COIL CONTROL

Heating ON
Cooling OFF
Dry OFF

NOTE: The 4-way valve reverses for 5 seconds right before start-up of the compressor.



9-3. RELATION BETWEEN MAIN SENSOR AND ACTUATOR

Sensor	Purpose	Actuator				
		Compressor	LEV	Outdoor fan motor	R.V.coil	Indoor fan motor
Discharge temperature thermistor	Protection	○	○			
Indoor coil temperature thermistor	Cooling: Coil frost prevention	○				
	Heating: High pressure protection	○	○			
Defrost thermistor	Heating: Defrosting	○	○	○	○	○
Fin temperature thermistor	Protection	○		○		
Ambient temperature thermistor	Cooling: Low ambient temperature operation	○	○	○		
Outdoor heat exchanger temperature thermistor	Cooling: Low ambient temperature operation	○	○	○		
	Cooling: High pressure protection	○	○	○		

10-1. CHANGE IN DEFROST SETTING

Changing defrost finish temperature

<JS> To change the defrost finish temperature, cut/solder the JS wire of the outdoor inverter P.C. board. (Refer to "11-6. TEST POINT DIAGRAM AND VOLTAGE".)

		Defrost finish temperature
Jumper		SUZ-AA18NL(H)-U1 SUZ-AA09NLHZ-U1 SUZ-AA24NL(H)-U1 SUZ-AA12NLHZ-U1 SUZ-AA30NL(H)-U1 SUZ-AA15NLHZ-U1 SUZ-AA36NL(H)-U1 SUZ-AA18NLHZ-U1
JS	Soldered (Initial setting)	50°F (10°C)
	None (Cut)	64°F (18°C)

10-2. PRE-HEAT CONTROL SETTING

PRE-HEAT CONTROL

When moisture gets into the refrigerant cycle, it may interfere the start-up of the compressor at low outside temperature. The pre-heat control prevents this interference. The pre-heat control turns ON when outside temperature is 68°F (20°C) or below. When pre-heat control is turned ON, compressor is energized. (About 50 W)

<JK> To activate the pre-heat control, cut the JK wire of the inverter P.C. board. (Refer to "11-6. TEST POINT DIAGRAM AND VOLTAGE".)

NOTE: When the inverter P.C. board is replaced, check the Jumper wires, and cut/solder them if necessary.

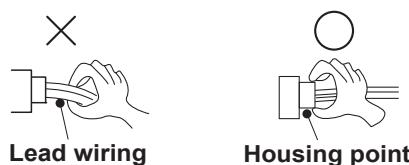
11-1. CAUTIONS ON TROUBLESHOOTING

1. Before troubleshooting, check the following

- 1) Check the power supply voltage.
- 2) Check the indoor/outdoor connecting wire for miswiring.

2. Take care of the following during servicing

- 1) Before servicing the air conditioner, be sure to turn OFF the main unit first with the remote controller, and turn off the breaker.
- 2) Be sure to turn OFF the power supply before removing the front panel, the cabinet, the top panel, and the electronic control P.C. board.
- 3) When removing the electrical parts, be careful of the residual voltage of smoothing capacitor.
- 4) When removing the electronic control P.C. board, hold the edge of the board with care NOT to apply stress on the components.
- 5) When connecting or disconnecting the connectors, hold the housing of the connector. DO NOT pull the lead wires.



3. Troubleshooting procedure

- 1) First, check if the OPERATION INDICATOR lamp is blinking ON and OFF to indicate an abnormality.
- 2) Before servicing check that the connector and terminal are connected properly.
- 3) When the electronic control P.C. board seems to be defective, check the copper foil pattern for disconnection and the components for bursting and discoloration.
- 4) Refer to "11-2. TROUBLESHOOTING CHECK TABLE" and "11-3. HOW TO PROCEED "SELF-DIAGNOSIS"".

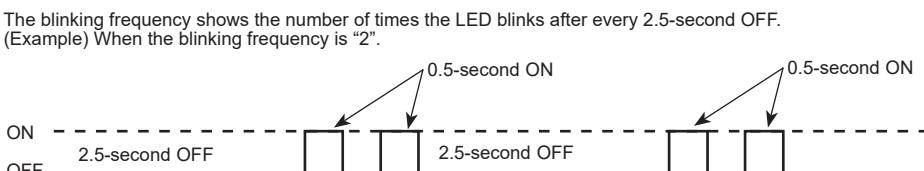
11-2. TROUBLE SHOOTING CHECK TABLE

No.	Symptoms	LED indication	check code	Abnormal point/ Condition	Condition	Remedy
1	Outdoor unit does not operate. 'Outdoor unit stops and restarts 3 minutes later' is repeated.	1-time blink every 2.5 seconds	UP	Outdoor power system	Overcurrent protection cut-out operates 3 consecutive times within 1 minute after the compressor gets started.	<ul style="list-style-type: none"> • Reconnect connector of compressor. • Refer to "11-5.Ⓐ How to check inverter/compressor". • Check stop valve.
2			U3	Outdoor thermistors	Discharge temperature thermistor shorts, or opens during compressor running.	<ul style="list-style-type: none"> • Refer to "11-5.Ⓒ Check of outdoor thermistors".
3		6-time blink 2.5 seconds OFF	FC		Fin temperature thermistor, defrost thermistor, P.C. board temperature thermistor, outdoor heat exchanger temperature thermistor or ambient temperature thermistor shorts, or opens during compressor running.	<ul style="list-style-type: none"> • Replace inverter P.C. board.
4			E8 / E9	Serial signal	The communication fails between the indoor and outdoor unit for 3 minutes.	<ul style="list-style-type: none"> • Check indoor/outdoor connecting wire. • Replace indoor or outdoor P.C. board if abnormality is displayed again.
5		11-time blink 2.5 seconds OFF	UE	Stop valve/ Closed valve	Closed valve is detected by compressor current.	<ul style="list-style-type: none"> • Check stop valve.
6		16-time flash 2.5 seconds OFF	PL	Outdoor refrigerant system abnormality	A closed valve and air trapped in the refrigerant circuit are detected based on the temperature sensed by the indoor and outdoor thermistors and the current of the compressor.	<ul style="list-style-type: none"> • Check for a gas leak in a connecting piping, etc. • Check stop valve. • Refer to "11-5.Ⓓ Check of outdoor refrigerant circuit".
7		2-time blink 2.5 seconds OFF		Overcurrent protection	Large current flows into intelligent power module.	<ul style="list-style-type: none"> • Reconnect connector of compressor. • Refer to "11-5.Ⓐ How to check inverter/compressor". • Check stop valve.
8		3-time blink 2.5 seconds OFF		Discharge temperature overheat protection	Temperature of discharge temperature thermistor exceeds 116°C, compressor stops. Compressor can restart if discharge temperature thermistor reads 100°C or less 3 minutes later.	<ul style="list-style-type: none"> • Check refrigerant circuit and refrigerant amount. • Refer to "11-5.Ⓔ Check of LEV".
9		4-time blink 2.5 seconds OFF		Fin temperature/P.C. board temperature thermistor overheat protection	Temperature of fin temperature thermistor on the heat sink exceeds 72 to 86°C or temperature of P.C. board temperature thermistor on the inverter P.C. board exceeds 72 to 85°C.	<ul style="list-style-type: none"> • Check around outdoor unit. • Check outdoor unit air passage. • Refer to "11-5.Ⓕ Check of outdoor fan motor".
10		5-time blink 2.5 seconds OFF		High pressure protection	Indoor coil thermistor exceeds 70°C in HEAT mode. Defrost thermistor exceeds 70°C in COOL mode.	<ul style="list-style-type: none"> • Check refrigerant circuit and refrigerant amount. • Check stop valve.
11		8-time blink 2.5 seconds OFF		Compressor synchronous abnormality	The waveform of compressor current is distorted.	<ul style="list-style-type: none"> • Reconnect connector of compressor. • Refer to "11-5.Ⓐ How to check inverter/compressor".
12		10-time blink 2.5 seconds OFF		Outdoor fan motor	Outdoor fan has stopped 3 times in a row within 30 seconds after outdoor fan start-up.	<ul style="list-style-type: none"> • Refer to "11-5.Ⓕ Check of outdoor fan motor". • Refer to "11-5.Ⓓ Check of inverter P.C. board".
13		12-time blink 2.5 seconds OFF		Each phase current of compressor	Each phase current of compressor cannot be detected normally.	<ul style="list-style-type: none"> • Refer to "11-5.Ⓓ Check of inverter P.C. board".
14		13-time blink 2.5 seconds OFF		DC voltage	DC voltage of inverter cannot be detected normally.	<ul style="list-style-type: none"> • Refer to "11-5.Ⓐ How to check inverter/compressor".
15	Outdoor unit operates.	1-time blink 2.5 seconds OFF		Frequency drop by current protection	When the input current exceeds approximately 12A(KA18)/16A(KA24)/16A(KA30)/16A(KA36), compressor frequency lowers.	<ul style="list-style-type: none"> • The unit is normal, but check the following. • Check if indoor filters are clogged. • Check if refrigerant is short. • Check if indoor/outdoor unit air circulation is short cycled.
16		3-time blink 2.5 seconds OFF		Frequency drop by high pressure protection	Temperature of indoor coil thermistor exceeds 131°F [55°C] in HEAT mode, compressor frequency lowers.	<ul style="list-style-type: none"> • Check refrigerant circuit and refrigerant amount. • Refer to "11-5.Ⓔ Check of LEV". • Refer to "11-5.Ⓒ Check of outdoor thermistors".
				Frequency drop by defrosting in COOL mode	Indoor coil thermistor reads 46°F [8°C] or less in COOL mode, compressor frequency lowers.	<ul style="list-style-type: none"> • Check refrigerant circuit and refrigerant amount. • Refer to "11-5.Ⓔ Check of LEV". • Check refrigerant circuit and refrigerant amount.
17		4-time blink 2.5 seconds OFF		Frequency drop by discharge temperature protection	Temperature of discharge temperature thermistor exceeds 232°F [111°C], compressor frequency lowers.	<ul style="list-style-type: none"> • Check refrigerant circuit and refrigerant amount. • Refer to "11-5.Ⓔ Check of LEV". • Refer to "11-5.Ⓒ Check of outdoor thermistors".
18		7-time blink 2.5 seconds OFF		Low discharge temperature protection	Temperature of discharge temperature thermistor has been 122°F [50°C] or less for 20 minutes.	<ul style="list-style-type: none"> • Refer to "11-5.Ⓔ Check of LEV". • Check refrigerant circuit and refrigerant amount.
19		8-time blink 2.5 seconds OFF	PAM protection PAM: Pulse Amplitude Modulation		The overcurrent flows into IGBT (Insulated Gate Bipolar transistor: TR821) or the bus-bar voltage reaches 320 V or more, PAM stops and restarts.	This is not malfunction. PAM protection will be activated in the following cases: 1. Instantaneous power voltage drop. (Short time power failure) 2. When the power supply voltage is high.
			Zero cross detecting circuit		Zero cross signal for PAM control cannot be detected.	<ul style="list-style-type: none"> • Check if the connector of the compressor is correctly connected. • Refer to "11-5.Ⓐ How to check inverter/compressor".
20		9-time blink 2.5 seconds OFF		Inverter check mode	The connector of compressor is disconnected, inverter check mode starts.	

NOTE: 1. The location of LED is illustrated at the right figure. Refer to "11-6. TEST POINT DIAGRAM".

2. LED is lighted during normal operation.

Inverter P.C. board



Blinking → LED

11-3. HOW TO PROCEED "SELF-DIAGNOSIS"

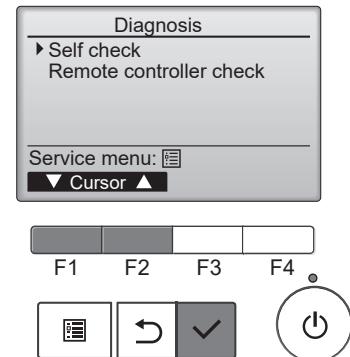
11-3-1. Self-diagnosis <PAR-4xMAA ("x" represents 0 or later)>

- ① Select "Service" from the Main menu,
and press the [✓] button.

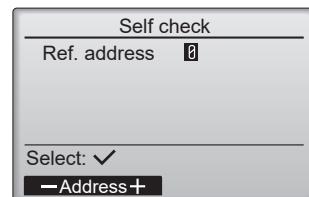
Select "Check" from the Service menu,
and press the [✓] button.

Select "Diagnosis" from the Check menu,
and press the [✓] button.

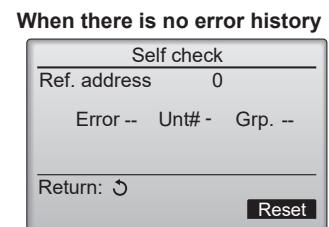
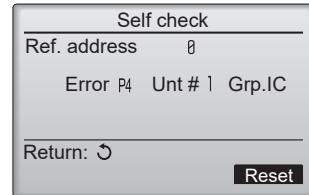
Select "Self check" with the [F1] or [F2] button,
and press the [✓] button.



- ② With the [F1] or [F2] button, enter the refrigerant address, and press the [✓] button.



- ③ Check code, unit number, attribute will appear. "-" will appear if no error history is available.



- ④ Resetting the error history

Press the [F4] button (Reset) on the screen that shows the error history.

A confirmation screen will appear asking if you want to delete the error history.

Press the [F4] button (OK) to delete the error history.

If deletion fails, "Request rejected" will appear.
"Unit not exist" will appear if no indoor units that are correspond to the entered address are found.

Navigating through the screens

- To go back to the Service menu [] button
- To return to the previous screen.....[] button



11-3-2. Remote controller check <PAR-4xMAA ("x" represents 0 or later)>

If operations cannot be completed with the remote controller, diagnose the remote controller with this function.

- ① Select "Service" from the Main menu, and press the [✓] button.



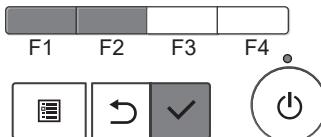
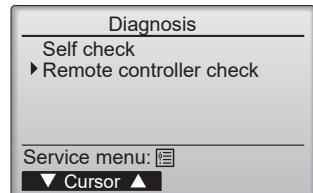
Select "Check" from the Service menu, and press the [✓] button.



Select "Diagnosis" from the Check menu, and press the [✓] button.



Select "Remote controller check" with the [F1] or [F2] button, and press the [✓] button.



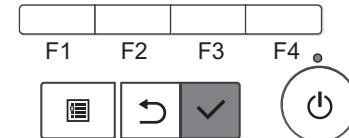
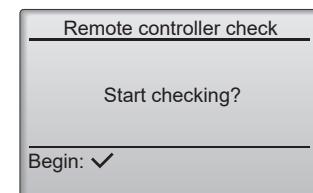
- ② Select "Remote controller check" from the Diagnosis menu and press the [✓] button to start the remote controller check and see the check results.



To cancel the remote controller check and exit the "Remote controller check" menu screen, press the [] or the [] button.

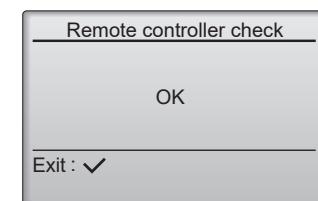


The remote controller will not reboot itself.



- ③ OK: No problems are found with the remote controller. Check other parts for problems.
E3, 6832: There is noise on the transmission line, or the indoor unit or another remote controller is faulty. Check the transmission line and the other remote controllers.
NG (ALL0, ALL1): Send-receive circuit fault. The remote controller needs replacing.
ERC: The number of data errors is the discrepancy between the number of bits in the data transmitted from the remote controller and that of the data that was actually transmitted over the transmission line. If data errors are found, check the transmission line for external noise interference.

Remote controller check results screen



If the [✓] button is pressed after the remote controller check results are displayed, remote controller check will end, and the remote controller will automatically reboot itself.

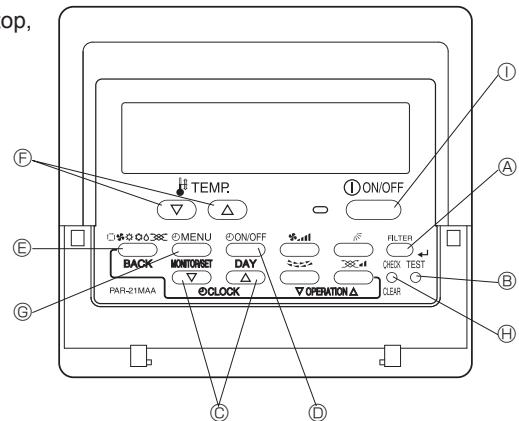
Check the remote controller display and see if anything is displayed (including lines). Nothing will appear on the remote controller display if the correct voltage (8.5–12 VDC) is not supplied to the remote controller. If this is the case, check the remote controller wiring and indoor units.

11-3-3. Self-diagnosis <PAR-21MAA>

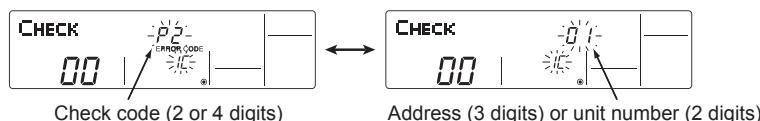
When a problem occurs to the air conditioner, the indoor and outdoor units will stop, and the problem is shown in the remote controller display.

[CHECK] and the refrigerant address are displayed on the temperature display, and the check code and unit number are displayed alternately as shown below.

- ① (If the outdoor unit is malfunctioning, the unit number will be "00".)
- ② In the case of group control, for which one remote controller controls multiple refrigerant systems, the refrigerant address and check code of the unit that first experienced trouble (i.e., the unit that transmitted the check code) will be displayed.
- ③ To clear the check code, press the **(① ON/OFF)** button.



(Alternating Display)



[When using remote-/local-controller combined operation, cancel the check code after turning off remote operation.

During central control by a MELANS controller, cancel the check code by pressing the **(① ON/OFF)** button.]

11-3-4. Self-Diagnosis During Maintenance or Service <PAR-21MAA>

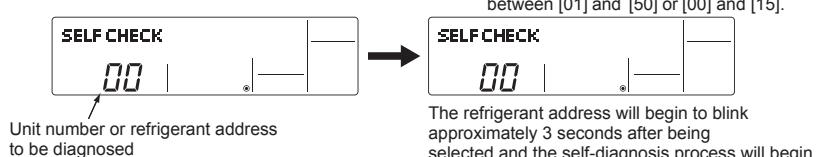
Since each unit has a function that stores check codes, the latest check code can be recalled even if it is cancelled by the remote controller or power is turned off.

Check the error history for each unit using the remote controller.

① Switch to self-diagnosis mode.

Press the **(CHECK)** button (Ⓐ in the picture above) twice within 3 seconds.

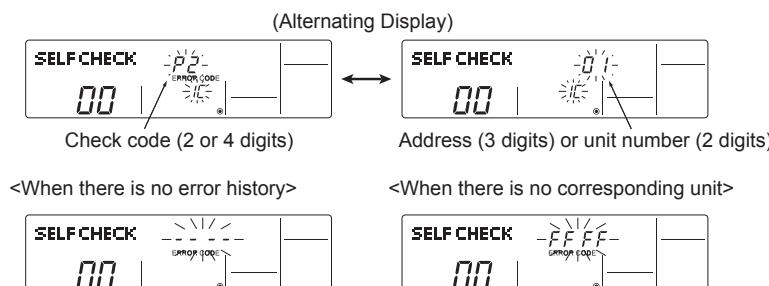
The display content will change as shown below.



② Display self-diagnosis results.

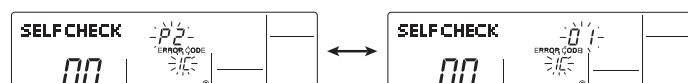
<When there is error history>

(For the definition of each check code, refer to the indoor unit's installation manual or service handbook.)



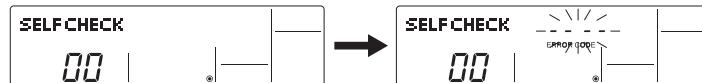
④ Reset the error history.

Display the error history in the diagnosis result display screen (see step ③).



Press the **(①) ON/OFF** button (① in the picture in the previous page) twice within 3 seconds. The self-diagnosis address or refrigerant address will blink.

When the error history is reset, the display will look like the one shown below. However, if you fail to reset the error history, the error content will be displayed again.



⑤ Cancel self-diagnosis.

Self-diagnosis can be cancelled by the following 2 methods.

Press the **(CHECK)** button (④ in the picture in the previous page) twice within 3 seconds. → Self-diagnosis will be cancelled and the screen will return to the previous state in effect before the start of self-diagnosis.

Press the **(①) ON/OFF** button (① in the picture in the previous page). → Self-diagnosis will be cancelled and the indoor unit will stop.

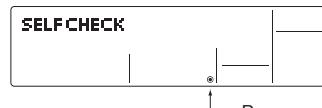
11-3-5. Remote controller check <PAR-21MAA>

If the air conditioner cannot be operated from the remote controller, diagnose the remote controller as explained below.

① First, check that the power-on indicator is lit.

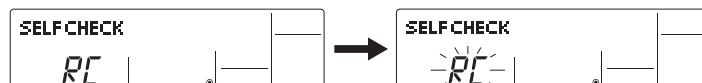
If the correct voltage (DC12 V) is not supplied to the remote controller, the indicator will not light.

If this occurs, check the remote controller's wiring and the indoor unit.



② Switch to the remote controller self-diagnosis mode.

Press the **(CHECK)** button (④ in the picture in the previous page) for 5 seconds or more. The display content will change as shown below.



Press the **(FILTER)** button (④ in the picture in the previous page) to start self-diagnosis.

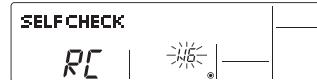
③ Remote controller self-diagnosis result

[When the remote controller is functioning correctly]



Check for other possible causes, as there is no problem with the remote controller.

[When the remote controller malfunctions]
(Error display 1) "NG" blinks. → The remote controller's transmitting-receiving circuit is defective.



The remote controller must be replaced with a new one.

[Where the remote controller is not defective, but cannot be operated.]
(Error display 2) [E3], [6833] or [6832] blinks. → Transmission is not possible.

(Error display 3) "ERC" and the number of data errors are displayed.
→ Data error has occurred.



There might be noise or interference on the transmission path, or the indoor unit or other remote controllers are defective. Check the transmission path and other controllers.



The number of data errors is the difference between the number of bits sent from the remote controller and the number actually transmitted through the transmission path. If such a problem is occurring, the transmitted data is affected by noise, etc. Check the transmission path.

When the number of data errors is "02":
Transmission data from remote controller
Transmission data on transmission path



④ To cancel remote controller diagnosis

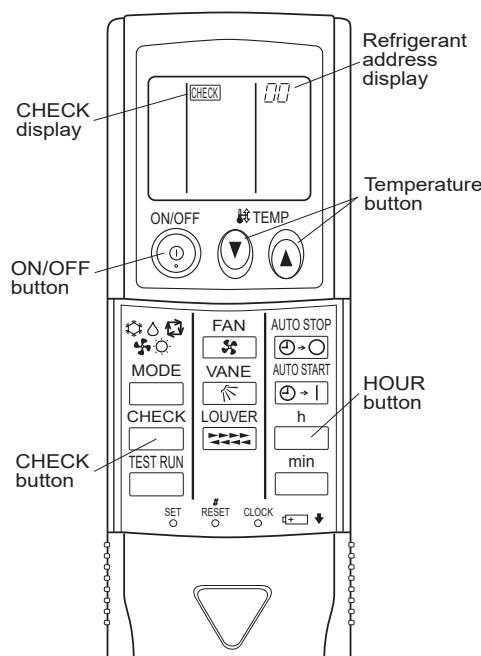
Press the **(CHECK)** button (④ in the picture in the previous page) for 5 seconds or more. Remote controller diagnosis will be cancelled, "PLEASE WAIT" and operation lamp will blink. After approximately 30 seconds, the state in effect before the diagnosis will be restored.

11-3-6. Self-diagnosis <Wireless remote controller>

<In case of trouble during operation>

When a malfunction occurs to air conditioner, both indoor unit and outdoor unit will stop and operation lamp blinks to inform unusual stop.

<Malfunction-diagnosis method at maintenance service>



[Procedure]

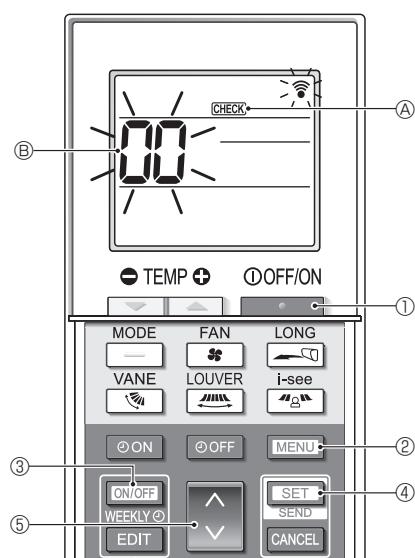
1. Press the CHECK button twice.
 - "CHECK" lights, and refrigerant address "00" blinks.
 - Check that the remote controller's display has stopped before continuing.
2. Press the temperature ∇ Δ buttons.
 - Select the refrigerant address of the indoor unit for the self-diagnosis.
 - Note: Set refrigerant address using the outdoor unit's DIP switch (SW1). (For more information, see the outdoor unit installation manual.)
3. Point the remote controller at the sensor on the indoor unit and press the HOUR button.
 - If an air conditioner error occurs, the indoor unit's sensor emits an intermittent beep sound, the operation light blinks, and the check code is output. (It takes 3 seconds at most for check code to appear.)
4. Point the remote controller at the sensor on the indoor unit and press the ON/OFF button.
 - The check mode is cancelled.

11-3-7. Self-diagnosis <Wireless remote controller PAR-SL101A-E>

<In case of trouble during operation>

When a malfunction occurs to air conditioner, both indoor unit and outdoor unit will stop and operation lamp blinks to inform unusual stop.

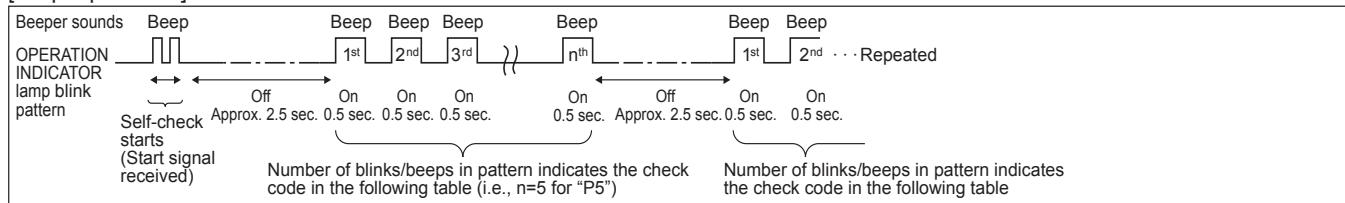
<Malfunction-diagnosis method at maintenance service>



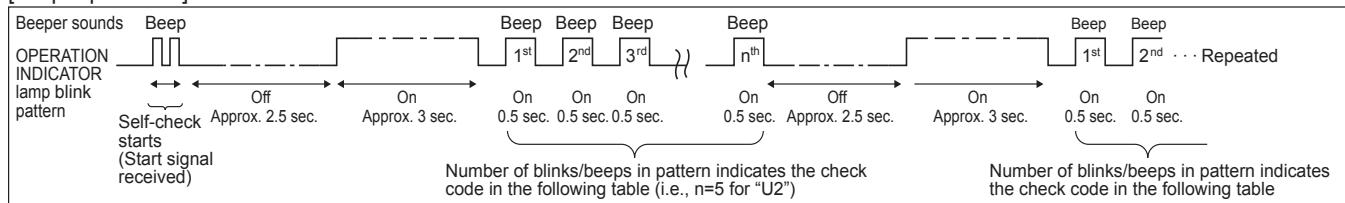
1. Press the \bullet button ① to stop the air conditioner.
 - If the weekly timer is enabled (**WEEKLY** is on), press the \bullet button ③ to disable it (**WEEKLY** is off).
2. Press the \bullet button ② for 5 seconds.
 - **CHECK** ④ comes on and the unit enters the self-check mode.
3. Press the \wedge button ⑤ to select the refrigerant address (M-NET address) ⑥ of the indoor unit for which you want to perform the self-check.
4. Press the \bullet button ④.
 - If an error is detected, the check code is indicated by the number of beeps from the indoor unit and the number of blinks of the OPERATION INDICATOR lamp.
5. Press the \bullet button ①.
 - **CHECK** ④ and the refrigerant address (M-NET address) ⑥ go off and the self-check is completed.

- Refer to the following tables for details on the check codes.

[Output pattern A]



[Output pattern B]



[Output pattern A] Errors detected by indoor unit

Wireless remote controller Beeper sounds/OPERATION INDICATOR lamp blinks (Number of times)	Wired remote controller Check code	Symptom	Remark
1	P1	Intake sensor error	
2	P2	Pipe (TH2) sensor error	
	P9	Pipe (TH5) sensor error	
3	E6,E7	Indoor/outdoor unit communication error	
4	P4	Drain sensor error/Float switch connector (CN4F) open	
5	P5	Drain pump error	
	PA	Forced compressor stop (due to water leakage abnormality)	
6	P6	Freezing/Overheating protection operation	
7	EE	Communication error between indoor and outdoor units	
9	E4, E5	Remote controller signal receiving error	
12	Fb (FB)*	Indoor unit control system error (memory error, etc.)	
14	PL	Abnormality of refrigerant circuit	
—	E0, E3	Remote controller transmission error	
—	E1, E2	Remote controller control board error	

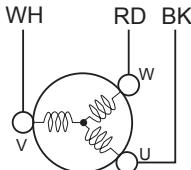
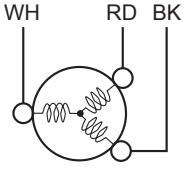
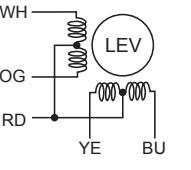
[Output pattern B] Errors detected by unit other than indoor unit (outdoor unit, etc.)

Wireless remote controller Beeper sounds/OPERATION INDICATOR lamp blinks (Number of times)	Wired remote controller Check code	Symptom
1	E9	Indoor/outdoor unit communication error (Transmitting error) (Outdoor unit)
2	UP	Compressor overcurrent interruption
3	U3,U4	Open/short of outdoor unit thermistors
14	Others	Other errors (Refer to the technical manual for the outdoor unit.)

- Notes:
- If the beeper does not sound again after the initial 2 beeps to confirm the self-check start signal was received and the OPERATION INDICATOR lamp does not come on, there are no error records.
 - If the beeper sounds 3 times continuously "beep, beep, beep (0.4 + 0.4 + 0.4 sec.)" after the initial 2 beeps to confirm the self-check start signal was received, the specified refrigerant address is incorrect.

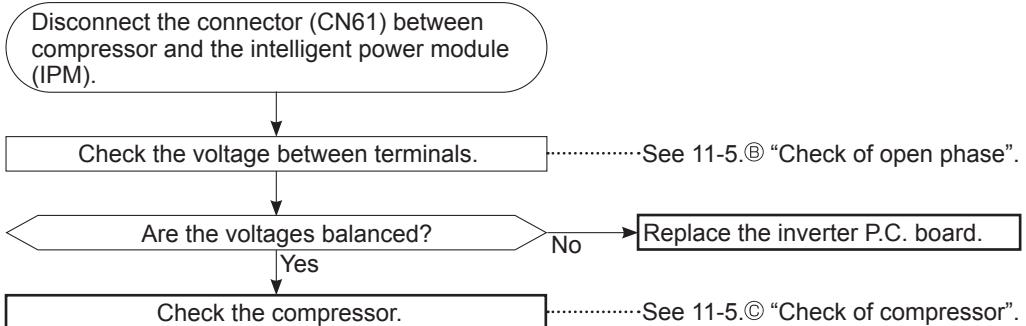
*The check code in the parenthesis indicates PAR-30MAA model.

11-4. TROUBLE CRITERION OF MAIN PARTS

Part name	Check method and criterion	Figure															
Defrost thermistor (RT61)	Measure the resistance with a tester.																
Fin temperature thermistor (RT64)	Refer to "Inverter P.C. board" in "11-6. TEST POINT DIAGRAM AND VOLTAGE", for the chart of thermistor.																
Ambient temperature thermistor (RT65)																	
Outdoor heat exchanger temperature thermistor (RT68)																	
Discharge temperature thermistor (RT62)	Measure the resistance with a tester. Before measurement, hold the thermistor with your hands to warm it up. Refer to "Inverter P.C. board" in "11-6. TEST POINT DIAGRAM AND VOLTAGE", for the chart of thermistor.																
Compressor	Measure the resistance between terminals with a tester. (Temperature: 14 to 104 °F (-10 to 40 °C)) <table border="1"> <thead> <tr> <th></th> <th>Normal (Ω)</th> <th></th> </tr> </thead> <tbody> <tr> <td>AA09/12/15/18</td> <td>AA24/30/36</td> <td></td> </tr> <tr> <td>U-V</td> <td>1.37 - 1.69</td> <td>0.64 - 0.78</td> </tr> <tr> <td>U-W</td> <td></td> <td></td> </tr> <tr> <td>V-W</td> <td></td> <td></td> </tr> </tbody> </table>		Normal (Ω)		AA09/12/15/18	AA24/30/36		U-V	1.37 - 1.69	0.64 - 0.78	U-W			V-W			
	Normal (Ω)																
AA09/12/15/18	AA24/30/36																
U-V	1.37 - 1.69	0.64 - 0.78															
U-W																	
V-W																	
Outdoor fan motor	Measure the resistance between lead wires with a tester. (Temperature: 14 ~ 104 °F (-10 ~ 40 °C)) <table border="1"> <thead> <tr> <th>Color of lead wire</th> <th>Normal (Ω)</th> </tr> </thead> <tbody> <tr> <td>RD - BK BK - WH WH - RD</td> <td>AA09/12/15/18 AA24/30/36 8 to 10</td> </tr> </tbody> </table>	Color of lead wire	Normal (Ω)	RD - BK BK - WH WH - RD	AA09/12/15/18 AA24/30/36 8 to 10												
Color of lead wire	Normal (Ω)																
RD - BK BK - WH WH - RD	AA09/12/15/18 AA24/30/36 8 to 10																
R. V. coil (21S4)	Measure the resistance with a tester. (Temperature: 14 to 104 °F (-10 to 40°C)) <table border="1"> <thead> <tr> <th>Normal ($k\Omega$)</th> </tr> </thead> <tbody> <tr> <td>0.97 to 1.38</td> </tr> </tbody> </table>	Normal ($k\Omega$)	0.97 to 1.38														
Normal ($k\Omega$)																	
0.97 to 1.38																	
Expansion valve coil (LEV)	Measure the resistance with a tester. (Temperature: 14 ~ 104 °F (-10 ~ 40 °C)) <table border="1"> <thead> <tr> <th>Color of lead wire</th> <th>Normal (Ω)</th> </tr> </thead> <tbody> <tr> <td>RD - OG</td> <td rowspan="4">37 to 54</td> </tr> <tr> <td>RD - WH</td> </tr> <tr> <td>RD - BU</td> </tr> <tr> <td>RD - YE</td> </tr> </tbody> </table>	Color of lead wire	Normal (Ω)	RD - OG	37 to 54	RD - WH	RD - BU	RD - YE									
Color of lead wire	Normal (Ω)																
RD - OG	37 to 54																
RD - WH																	
RD - BU																	
RD - YE																	
Defrost heater	Measure the resistance using a tester. [Temperature: 14 - 104°F (-10 - 40°C)] <table border="1"> <thead> <tr> <th>Normal ($k\Omega$)</th> </tr> </thead> <tbody> <tr> <td>376 - 461</td> </tr> </tbody> </table>	Normal ($k\Omega$)	376 - 461														
Normal ($k\Omega$)																	
376 - 461																	

11-5. TROUBLESHOOTING FLOW

A How to check inverter/compressor



B Check of open phase

- With the connector between the compressor and the intelligent power module disconnected, activate the inverter and check if the inverter is normal by measuring the voltage balance between the terminals.

Output voltage is 50 - 130 V. (The voltage may differ according to the tester.)

<Operation method (Test run operation)>

- Press the TEST (RUN) button twice.
- Press the MODE button and switch to the COOL (or HEAT) mode.
- Compressor starts at rated frequency in COOL mode or 58 Hz in HEAT mode.
- Indoor fan operates at High speed.
- To cancel test run operation, press the ON/OFF button on remote controller.

<Measurement point>

at 3 points

BK (U) - WH (V)

Measure AC voltage between the lead wires at 3 points.

BK (U) - RD (W)

WH(V) - RD (W)

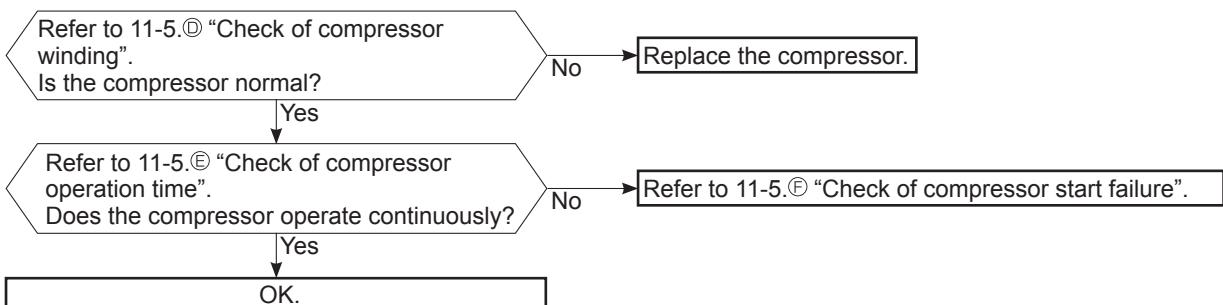
NOTE: 1. Output voltage varies according to power supply voltage.

2. Measure the voltage by analog type tester.

3. During this check, LED of the inverter P.C. board blinks 9 times.

(Refer to "11-6. TEST POINT DIAGRAM AND VOLTAGE".)

C Check of compressor



D Check of compressor winding

- Disconnect the connector between the compressor and intelligent power module, and measure the resistance between the compressor terminals.

<Measurement point>

Measure the resistance between the lead wires at 3 points.

BK - WH

BK - RD

WH - RD

<Judgement>

Refer to "11-4. TROUBLE CRITERION OF MAIN PARTS".

0[Ω] Abnormal [short]

Infinite [Ω] Abnormal [open]

NOTE: Be sure to zero the ohmmeter before measurement.

E Check of compressor operation time

- Connect the compressor and activate the inverter. Then measure the time until the inverter stops due to over current.

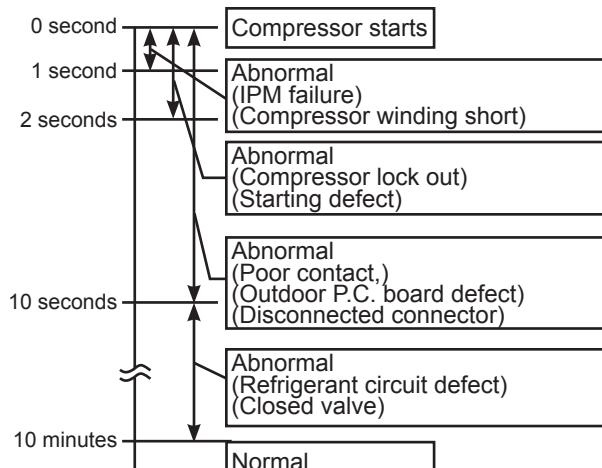
<Operation method>

Start heating or cooling operation by pressing the TEST button twice on the remote controller. (Test run mode)
(TEST RUN OPERATION: Refer to 11-5(B))

<Measurement>

Measure the time from the start of compressor to the stop of compressor due to overcurrent.

<<Judgement>>



F Check of compressor start failure

Confirm that 1~4 is normal.

- Electrical circuit check
 - Contact of the compressor connector
 - Output voltage of inverter P.C. board and balance of them (See 11-5.(B))
 - Direct current voltage between DB61(+) and (-) on the inverter P.C. board
 - Voltage between outdoor terminal block S1-S2

Does the compressor run for 10 seconds or more after it starts? Yes → Check the refrigerant circuit. Check the stop valve.

No

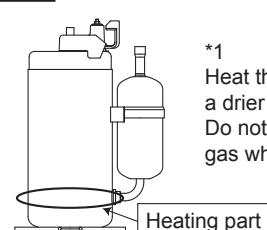
After the compressor is heated with a drier, does the compressor start?^{*1} No → Replace the compressor.

Yes

Compressor start failure. Activate pre-heat control.
(Refer to "10-2. PRE-HEAT CONTROL SETTING")

WARNING:

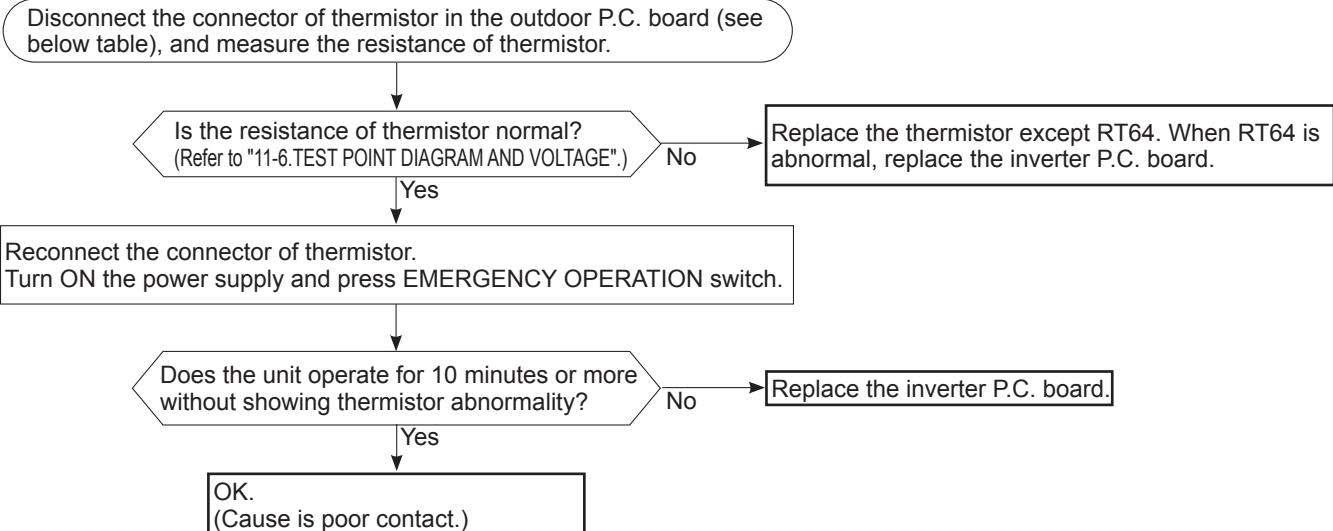
When opening or closing the valve below freezing temperatures, refrigerant may spurt out from the gap between the valve stem and the valve body, resulting in injuries.



*1

Heat the compressor with a drier for about 20 minutes. Do not recover refrigerant gas while heating.

G Check of outdoor thermistors



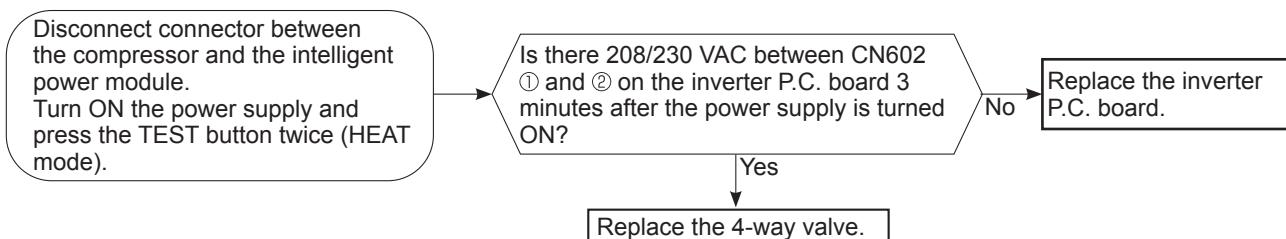
Thermistor	Symbol	Connector, Pin No.	Board
Defrost	RT61	Between CN671 pin1 and pin2	Inverter P.C. board
Discharge temperature	RT62	Between CN671 pin3 and pin4	
Fin temperature	RT64	Between CN673 pin1 and pin2	
Ambient temperature	RT65	Between CN672 pin1 and pin2	
Outdoor heat exchanger temperature	RT68	Between CN671 pin5 and pin6	

H Check of R.V. coil

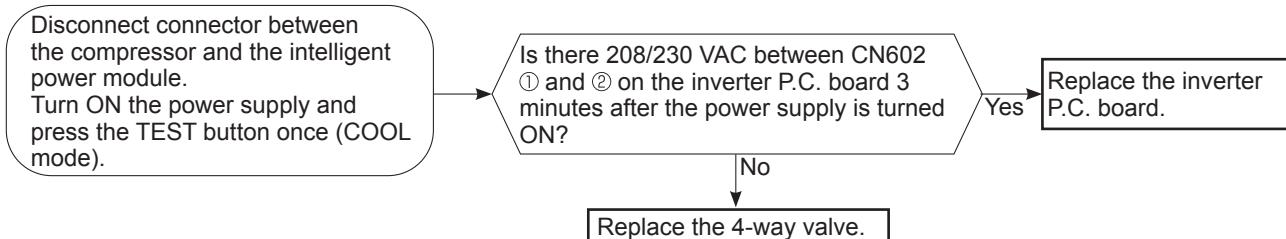
First of all, measure the resistance of R.V. coil to check if the coil is defective. Refer to "11-4. TROUBLE CRITERION OF MAIN PARTS".

In case CN602 is disconnected or R.V. coil is open, voltage is generated between the terminal pins of the connector although no signal is being transmitted to R.V. coil. Check if CN602 is connected.

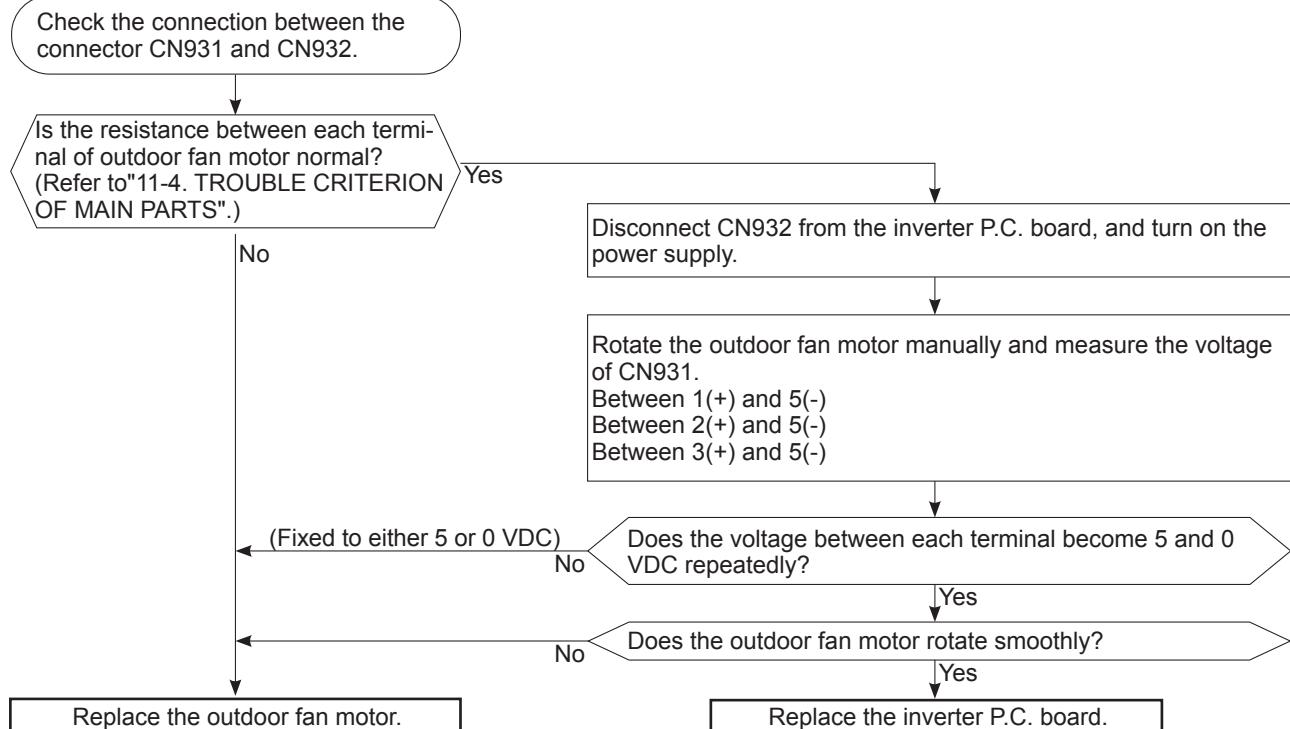
Unit operates in COOL mode even if it is set to HEAT mode.



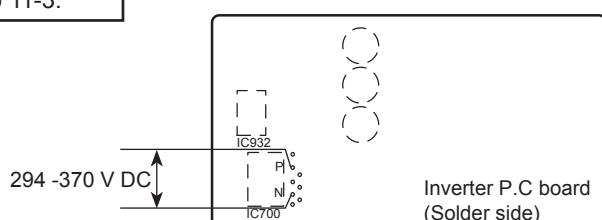
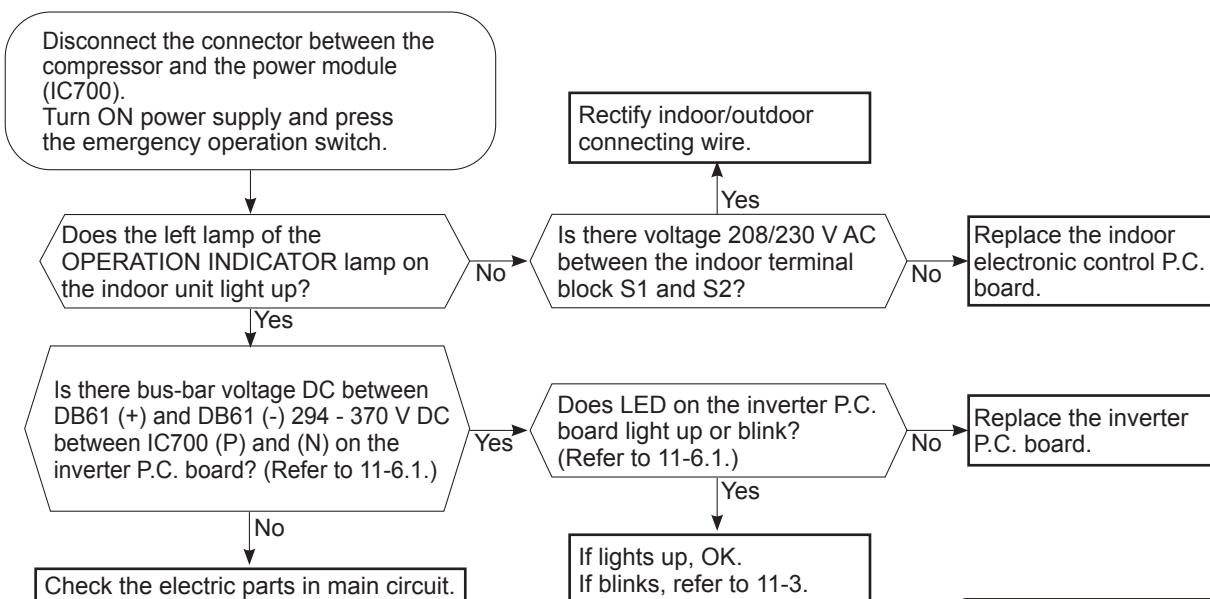
Unit operates in HEAT mode even if it is set to COOL mode.



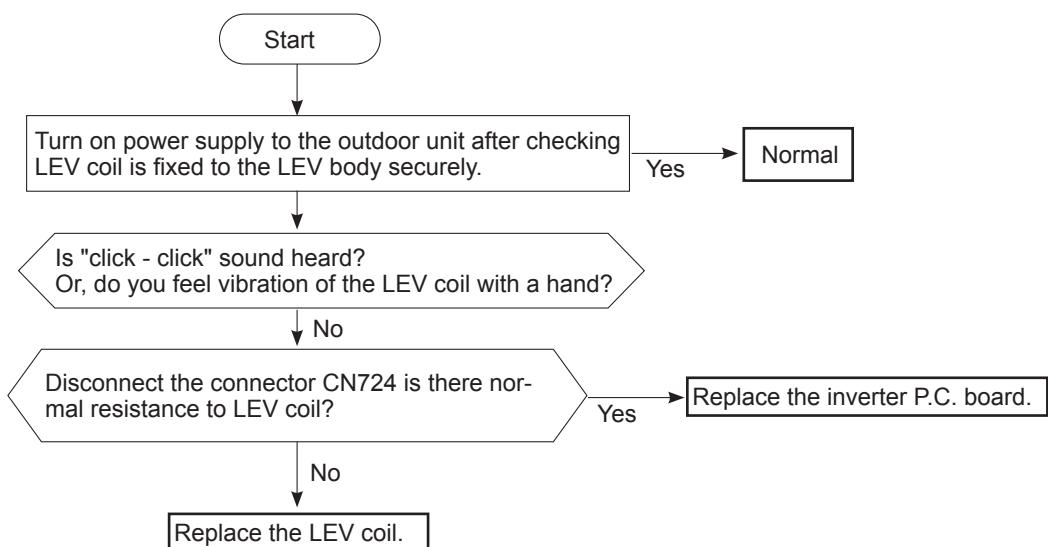
I Check of outdoor fan motor



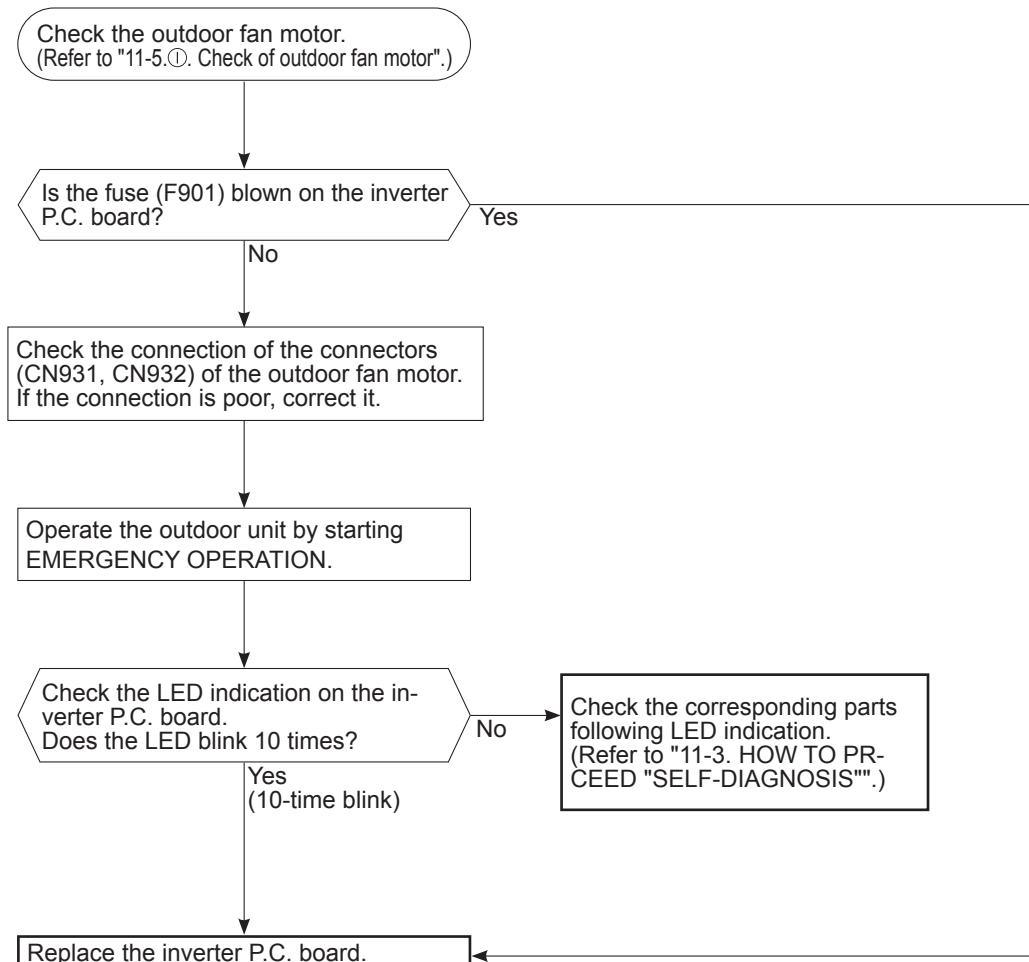
J Check of power supply



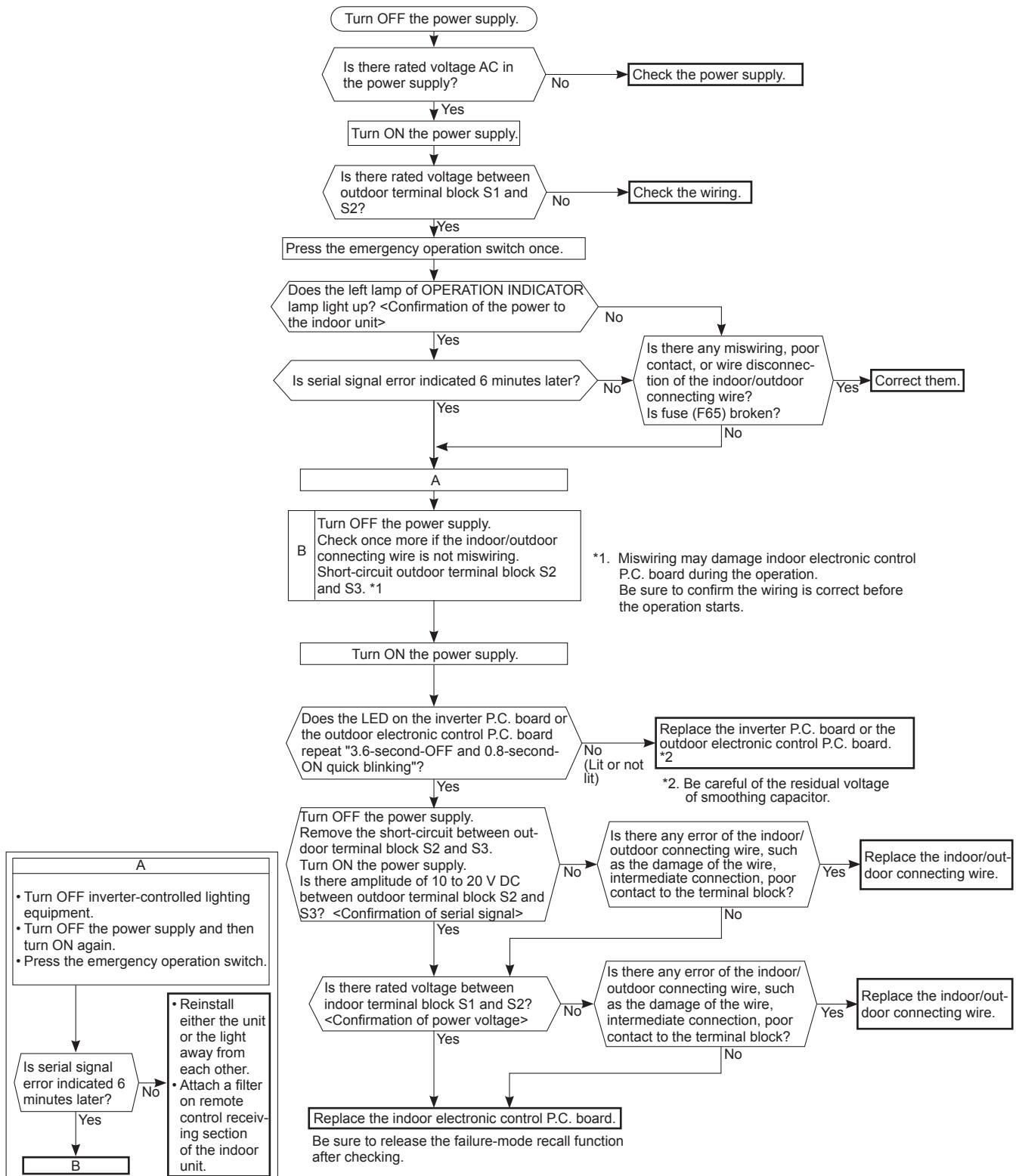
K Check of LEV



L Check of inverter P.C. board



(M) How to check miswiring and serial signal error



N Check the defrost heater

SUZ-AA18/24/30/36NLH-U1 SUZ-AA09/12/15/18NLHZ-U1

Check the following points before checking electric continuity.

1. Does the resistance of ambient temperature thermistor have the characteristics? Refer to 11-6.1.
2. Is the resistance of defrost heater normal? Refer to 11-4.
3. Does the heater protector remain conducted (not open)?
4. Are both ambient temperature thermistor and circuit of defrost heater securely connected to connectors?

In HEAT mode, for more than 5 minutes, let the ambient temperature thermistor continue to read 32°F (0°C) or below, and let the defrost thermistor continue to read 30°F (-1°C) or below.

NOTE: In case both thermistors are more than the above temperature, cool them with cold water etc...

Is there 208/230 VAC between CN601 ① and ② on the inverter P.C. board? Refer to 11-6.1.

Yes

Not the problem of the inverter P.C. board.

No

Replace the inverter P.C. board.

O Check of outdoor refrigerant circuit

Has the operation stopped during pump down?

No

Was the operation started with the stop valve closed, and was it opened during operation?

Yes

The unit occasionally stops when the stop valve is opened or closed during operation. Open the stop valve and start the cooling operation again.

Yes

The operation has stopped to prevent the diesel explosion caused by air trapped in the refrigerant circuit. Close the stop valve, and disconnect the power plug or turn the breaker OFF. *

WARNING:

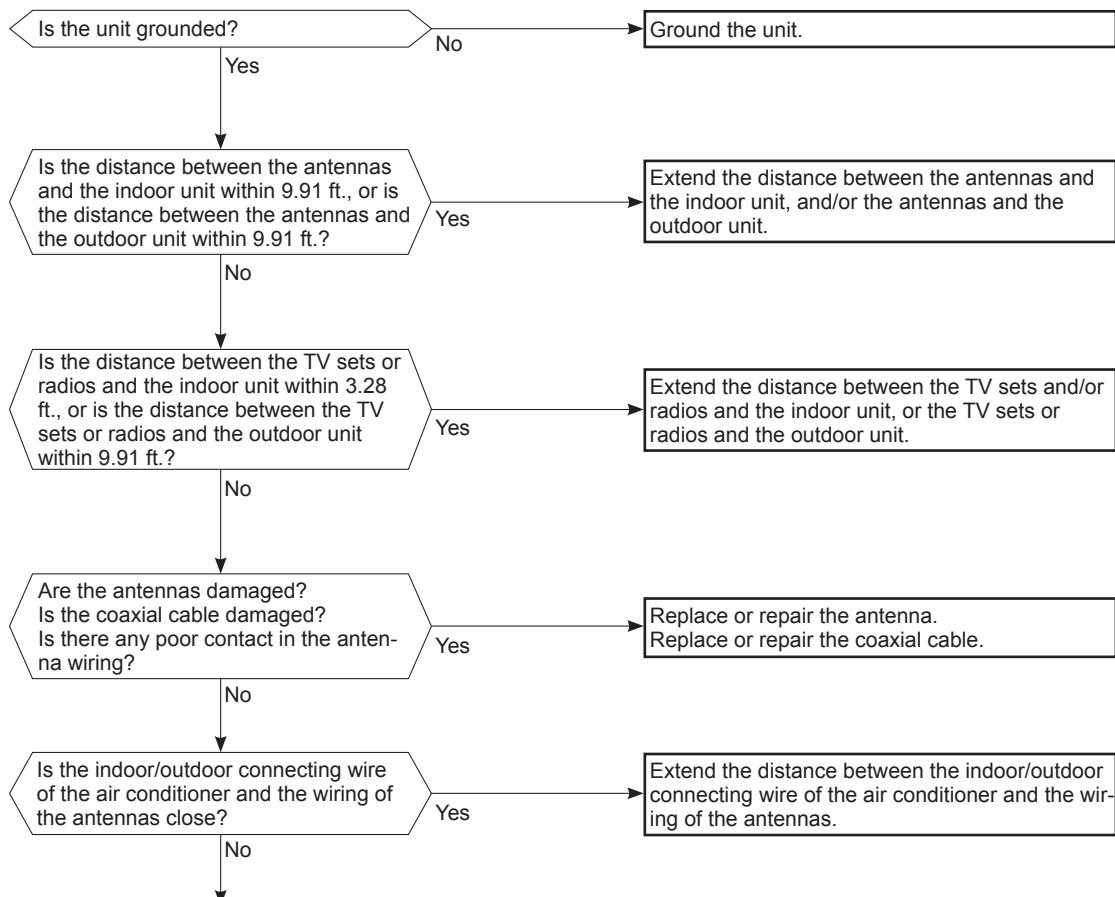
When opening or closing the valve below freezing temperatures, refrigerant may spurt out from the gap between the valve stem and the valve body, resulting in injuries.

The refrigerant gas amount may be 60% or less than the normal amount. Identify where the gas is leaking from, and fix the leak.

No

* CAUTION : Do not start the operation again to prevent hazards.

(P) Electromagnetic noise enters into TV sets or radios



Even if all of the above conditions are fulfilled, the electromagnetic noise may enter, depending on the electric field strength or the installation condition (combination of specific conditions such as antennas or wiring).

Check the followings before asking for service.

1. Devices affected by the electromagnetic noise
TV sets, radios (FM/AM broadcast, shortwave)
2. Channel, frequency, broadcast station affected by the electromagnetic noise
3. Channel, frequency, broadcast station unaffected by the electromagnetic noise
4. Layout of:
indoor/outdoor unit of the air conditioner, indoor/outdoor wiring, grounding wire, antennas, wiring from antennas, receiver
5. Electric field intensity of the broadcast station affected by the electromagnetic noise
6. Presence or absence of amplifier such as booster
7. Operation condition of air conditioner when the electromagnetic noise enters in
 - 1) Turn OFF the power supply once, and then turn ON the power supply. In this situation, check for the electromagnetic noise.
 - 2) Within 3 minutes after turning ON the power supply, press OPERATE/STOP (ON/OFF) button on the remote controller for power ON, and check for the electromagnetic noise.
 - 3) After a short time (3 minutes later after turning ON), the outdoor unit starts running. During operation, check for the electromagnetic noise.
 - 4) Press OPERATE/STOP (ON/OFF) button on the remote controller for power OFF, when the outdoor unit stops but the indoor/outdoor communication still runs on. In this situation, check for the electromagnetic noise.

② Check of compressor protector

Disconnect the connector of compressor protector in the inverter P.C. board, and check the conduction of compressor protector

Is the compressor protector conductive?

Yes

Is the discharge temperature thermistor normal? Refer to 11-5.
③ "Check of outdoor thermistors".

Yes

Operate the unit and re-confirm if the abnormality occur.

No

Take time until the temperature of the compressor protector is lowered to ordinary temperature.

Is the compressor protector conductive?

Yes

Replace the discharge temperature thermistor.

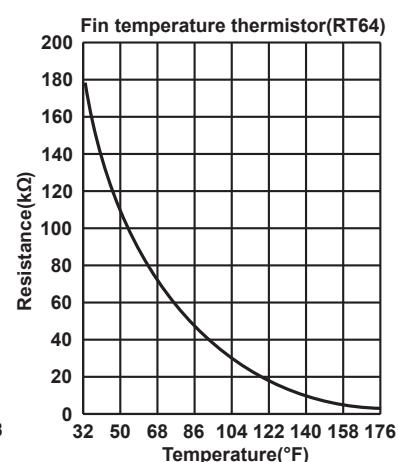
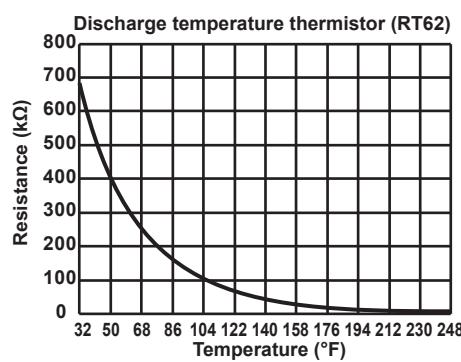
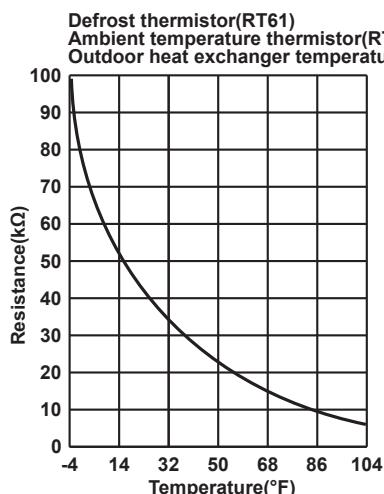
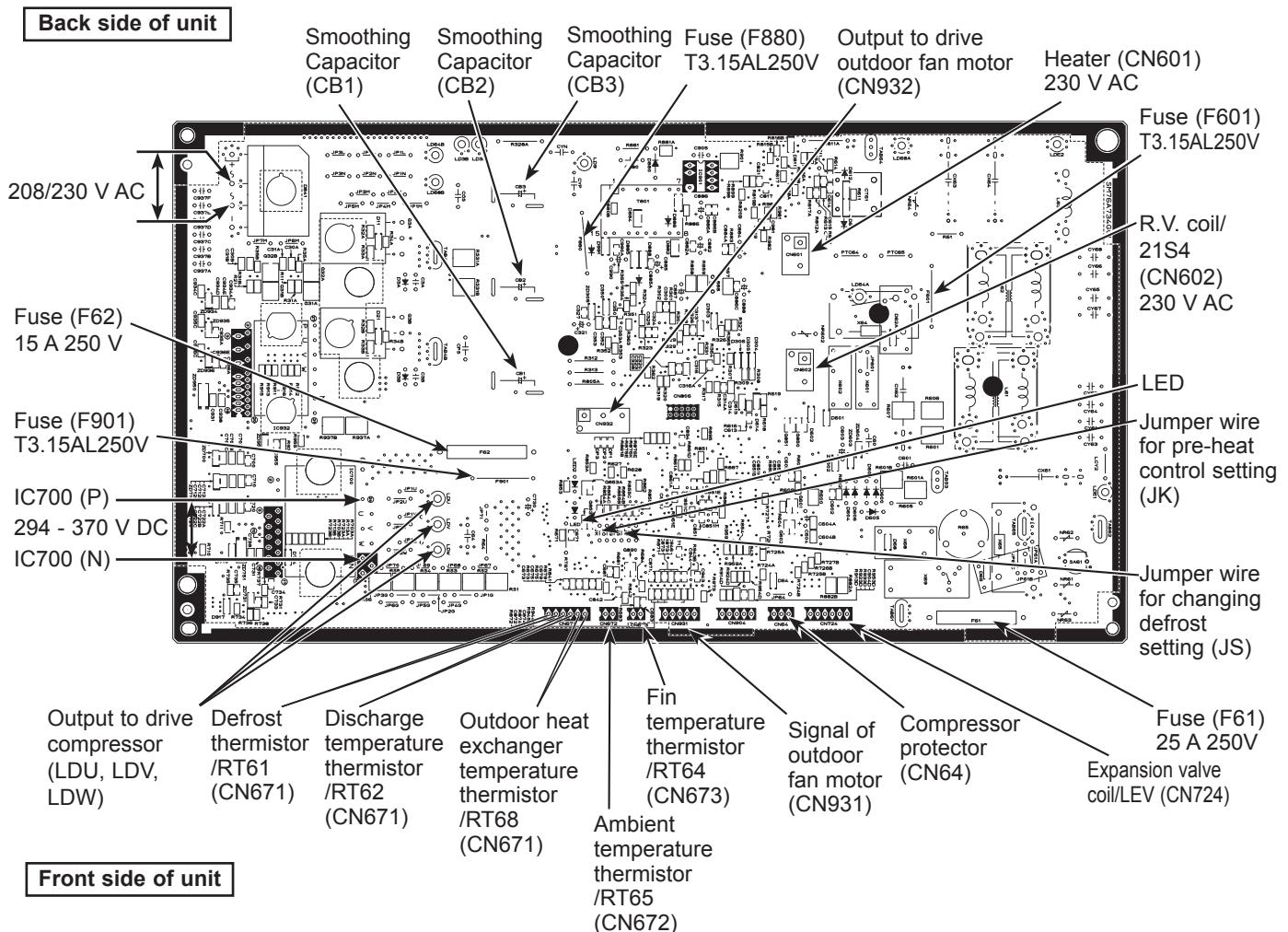
No

Replace the compressor protector.

11-6. TEST POINT DIAGRAM AND VOLTAGE

1. Inverter P.C. board

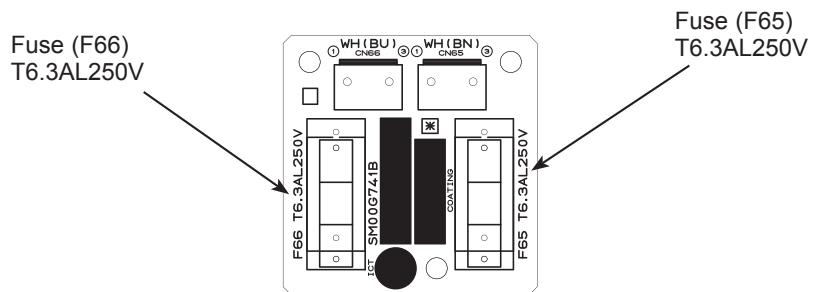
SUZ-AA18NL(H)-U1 SUZ-AA24NL(H)-U1 SUZ-AA30NL(H)-U1 SUZ-AA36NL(H)-U1
 SUZ-AA09NLHZ-U1 SUZ-AA12NLHZ-U1 SUZ-AA15NLHZ-U1 SUZ-AA18NLHZ-U1





2. Fuse P.C. board

SUZ-AA18NL(H)-U1 SUZ-AA24NL(H)-U1 SUZ-AA30NL(H)-U1 SUZ-AA36NL(H)-U1
SUZ-AA09NLHZ-U1 SUZ-AA12NLHZ-U1 SUZ-AA15NLHZ-U1 SUZ-AA18NLHZ-U1



12-1. UNIT FUNCTION SETTING BY THE REMOTE CONTROLLER

Each function can be set according to necessity using the remote controller. The setting of function for each unit can only be done by the remote controller. Select function available from the table 1.

<Table 1> Function selections

(1) Functions available when setting the unit number to 00.

Function	Settings	Mode No. Wired remote controller (RF thermostat)	Setting No.	● : Initial setting (when sent from the factory)	Check	Remarks
Power failure automatic recovery	Not available	01 (101)	1			
	Available (Approx. 4-minute wait-period after power is restored.)		2	●		
Indoor temperature detecting	Indoor unit's internal sensor	02 (—)	1		●	
	Data from main remote controller *1		2		●	
LOSSNAY connectivity	Not supported	03 (103)	1	●		
	Supported (indoor unit dose not intake outdoor air through LOSSNAY)		2		●	
	Supported (indoor unit intakes outdoor air through LOSSNAY)		3		●	
Power supply voltage	230V	04 (104)	1	●		
	208V		2		●	
Frost prevention temperature	2°C [36°F] (Normal)	15 (115)	1	●		
	3°C [37°F]		2		●	

*1 Can be set only when a wired remote controller is used.

When using 2 remote controllers (2-remote controller operation), the remote controller with built-in sensor must be set as a main remote controller.

(2) Functions are available when setting the unit number to 01.

Function	Settings	Mode No. Wired remote controller (RF thermostat)	Setting No.	● : Initial setting (Factory setting)				Check
				Ceiling concealed	Ceiling cassette	Ceiling suspended	Multi position	
				SEZ-AE-NL	SLZ-AF-NL	PEAD-AA-NL	SVZ-AP-NL	
Filter sign	100h	07 (107)	1					
	2500h		2		●			
	No filter sign indicator		3	●			●	
External static pressure	5/15/35/50Pa (0.02/0.06/0.14/0.20in.WG)	08 (108)	Refer to the table below	—	—	Refer to the table below	Refer to the table below	
			10 (110)	Refer to the table below	—	—	Refer to the table below	
Heater control *2	No heater present	11 (111)	1	—	—	—	●	
	Heater present		2	—	—	—	●	
	SEZ, SLZ : Set temp -4.5°F ON PEAD, SVZ : Heater not operation in Defrost/Error	23 (123)	1	●	●	●	●	
	SEZ, SLZ : Set temp -1.8°F ON PEAD, SVZ : Heater not operation in Defrost/Error*4		2				●	
	Set temperature in heating mode *3	24 (124)	1	●	●	●	●	
	Not available		2					
Fan speed during the heating thermo OFF	Extra low	25 (125)	1	●	●	●	●	
	Stop		2					
	Set fan speed		3					
Fan speed during the cooling thermo OFF	Set fan speed	27 (127)	1	●	●	●	●	
	Stop		2					
Detection of abnormality of the pipe temperature (P8)	Available	28 (128)	1	●	●			
	Not available		2			●	●	

*2 For the detail of Heater control, refer to the service manual.

*3 4 degC (7.2 degF) up

*4 Depend on the error, heater may not operate please refer to SVZ service manual.

External static pressure setting for SEZ.

External static pressure	Setting No.		● : Initial setting (Factory setting)	Check
	Mode No. 08	Mode No. 10		
5Pa (0.02in.WG)	1	2		
15Pa (0.06in.WG)	1	1	●	
35Pa (0.14in.WG)	2	1		
50Pa (0.20in.WG)	3	1		

External static pressure setting for SVZ (Vertical, Horizontal left, Horizontal right position*).

External static pressure	Setting No.		● : Initial setting (Factory setting)	Check
	Mode No. 08	Mode No. 10		
75Pa (0.3in.WG)	1	1		
125Pa (0.5in.WG)	2	1	●	
200Pa (0.8in.WG)	3	1		

* Regarding to down flow setting, please refer to down flow kit installation manual.

External static pressure setting for PEAD.

External static pressure	Setting No.		● : Initial setting (Factory setting)	Check
	Mode No. 08	Mode No. 10		
35Pa (0.14in.WG)	2	1		
50Pa (0.20in.WG)	3	1	●	
70Pa (0.28in.WG)	1	2		
100Pa (0.40in.WG)	2	2		
150Pa (0.60in.WG)	3	2		

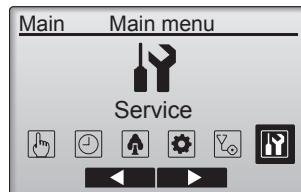
12-1-1. Selecting functions using the wired remote controller <PAR-41MAA>

<Service menu>

Maintenance password is required

- ① Select "Service" from the Main menu, and press the [✓] button.

*At the main display, the menu button and select "Service" to make the maintenance setting.



- ② When the Service menu is selected, a window will appear asking for the password.

To enter the current maintenance password (4 numerical digits), move the cursor to the digit you want to change with the [F1] or [F2] button.



Set each number (0 through 9) with the [F3] or [F4] button.



Then, press the [✓] button.

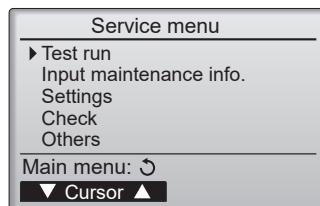
Note: The initial maintenance password is "9999". Change the default password as necessary to prevent unauthorized access. Have the password available for those who need it.

: If you forget your maintenance password, you can initialize the password to the default password "9999" by pressing and holding the [F1] button for 10 seconds on the maintenance password setting screen.



- ③ If the password matches, the Service menu will appear.

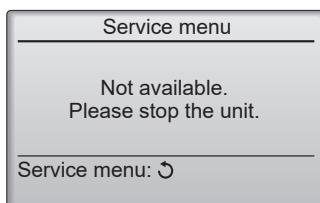
Note: Air conditioning units may need to be stopped to make only at "settings". There may be some settings that cannot be made when the system is centrally controlled.



A screen will appear that indicates the setting has been saved.

Navigating through the screens

- To go back to the Service menu [] button
- To return to the previous screen [] button



12-2. FUNCTION SETTING

12-2-1. PAR-41MAA

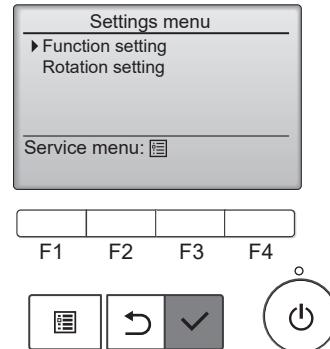
1. Select "Service" from the Main menu, and press the [✓] button.



- Select "Function setting", and press the [✓] button.



- Select "Setting" from the Service menu, and press the [✓] button.

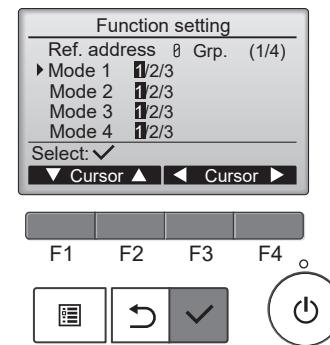


<The display format and the setting method vary with indoor units.>

Pattern 1

2. Set the indoor unit refrigerant addresses and unit numbers with the [F1] through [F4] buttons, and then press the [✓] button to confirm the current setting.

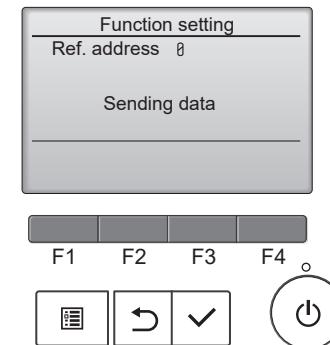
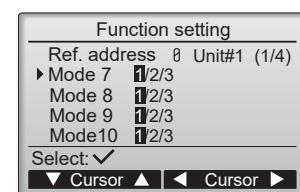
3. When data collection from the indoor units is completed, the current settings appears highlighted. Non-highlighted items indicate that no function settings are made. Screen appearance varies depending on the "Unit No." setting.



4. Use the [F1] or [F2] button to move the cursor to select the mode number, and change the setting number with the [F3] or [F4] button.

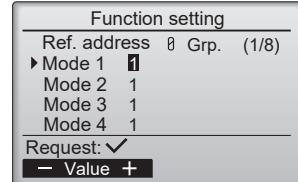
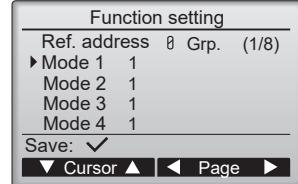
5. When the settings are completed, press the [✓] button to send the setting data from the remote controller to the indoor units.

6. When the transmission is successfully completed, the screen will return to the Function setting screen.



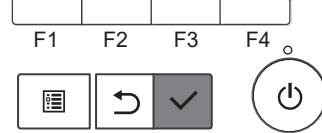
Pattern 2

4. Toggle through the pages with the [F3] or [F4] button.
5. Select the mode number with the [F1] or [F2] button, and then press the [✓] button.
6. Select the setting number with the [F1] or [F2] button.
Setting range for modes 1 through 28: 1 through 3
Setting range for modes 31 through 66: 1 through 15
7. When the settings are completed, press the [✓] button to send the setting data from the remote controller to the indoor units.
8. When the transmission is successfully completed, the screen will return to the Function setting screen.



Note:

- Refer to the indoor unit Installation Manual for the detailed information about initial settings, mode numbers, and setting numbers for the indoor units.
- Be sure to write down the settings for all functions if any of the initial settings has been changed after the completion of installation work.



<Detaching method of the terminal with locking mechanism>

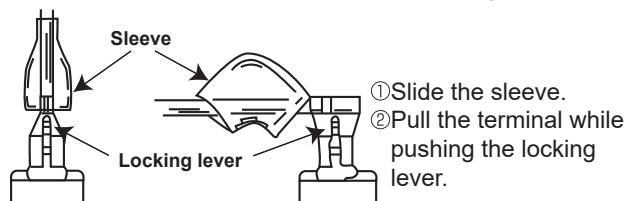
The terminal which has the locking mechanism can be detached as shown below.

There are 2 types of the terminal with locking mechanism.

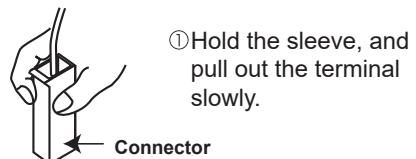
The terminal without locking mechanism can be detached by pulling it out.

Check the shape of the terminal before detaching.

- (1) Slide the sleeve and check if there is a locking lever or not.



- (2) The terminal with the connector shown below has the locking mechanism.



**13-1. SUZ-AA09NLHZ
SUZ-AA18NL**

**SUZ-AA12NLHZ
SUZ-AA18NLH**

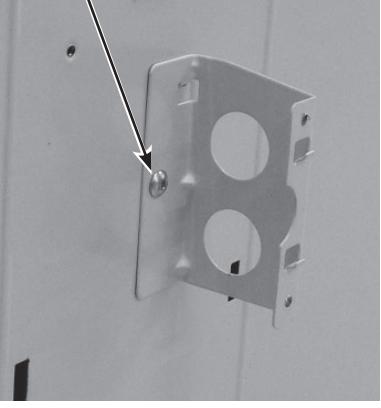
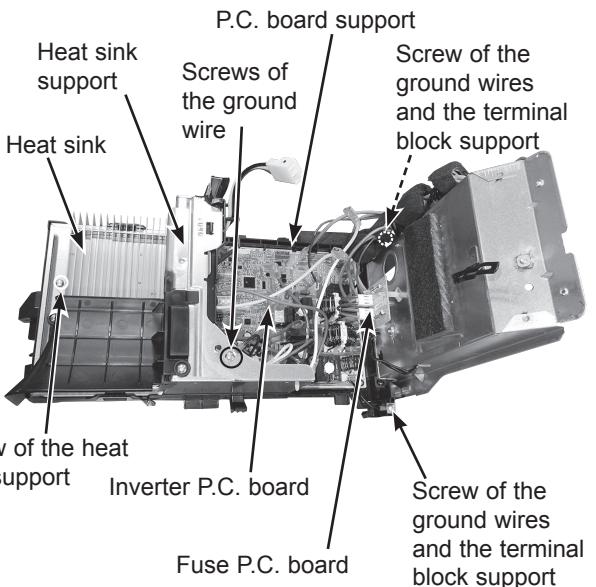
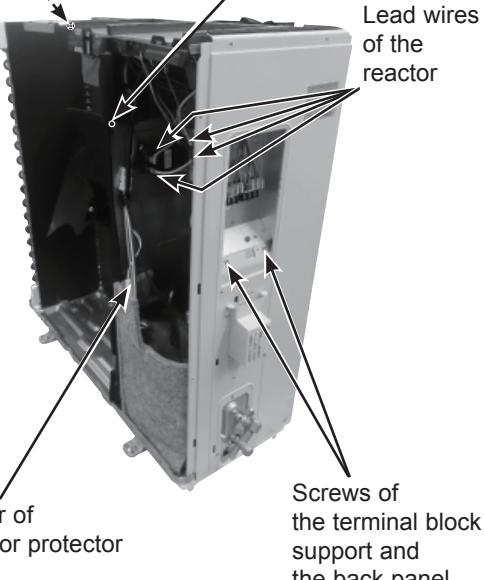
SUZ-AA15NLHZ

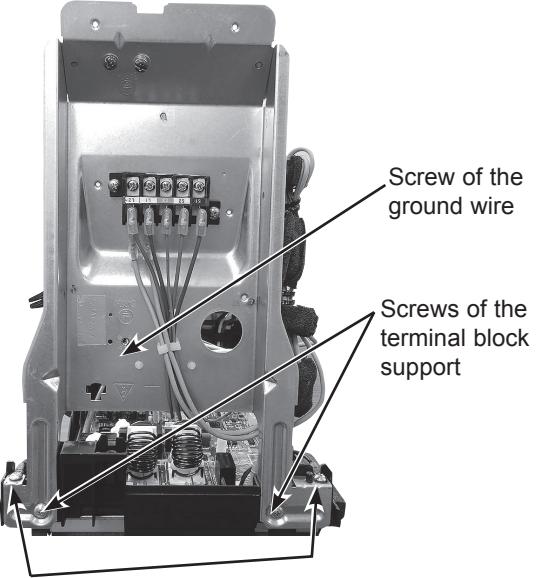
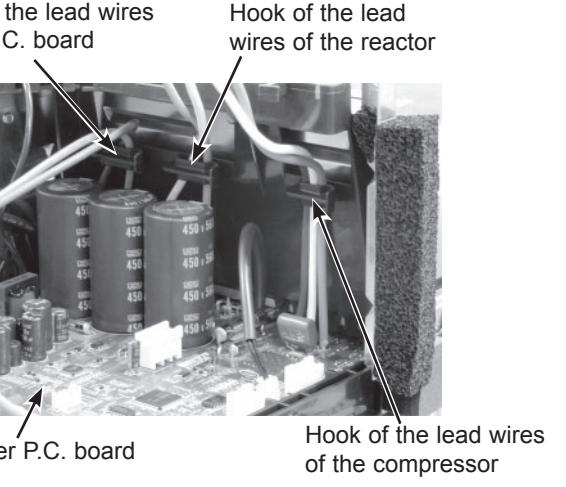
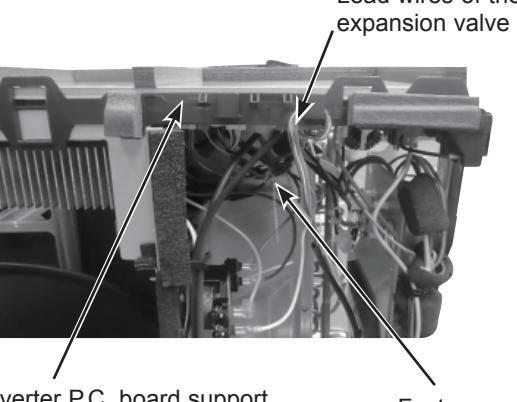
SUZ-AA18NLHZ

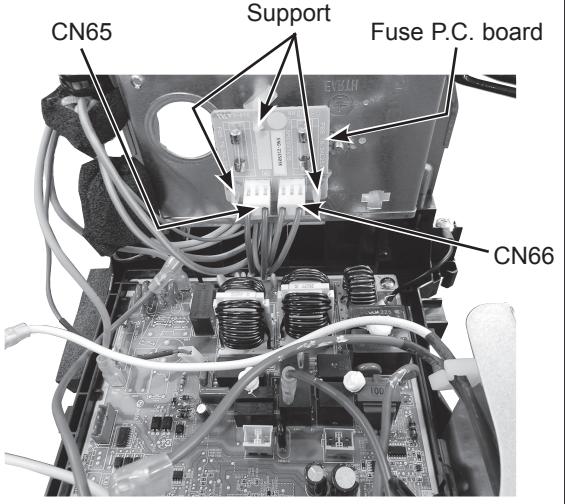
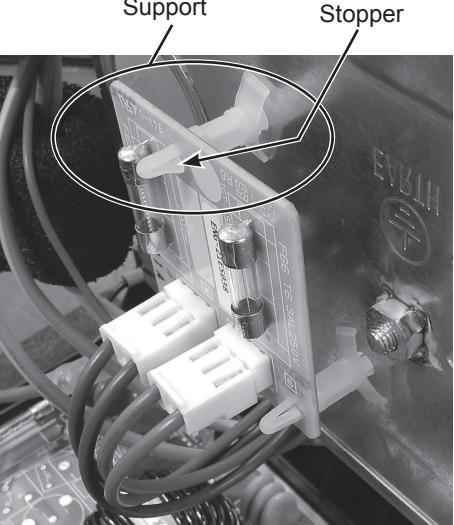
NOTE: Turn OFF the power supply before disassembly.

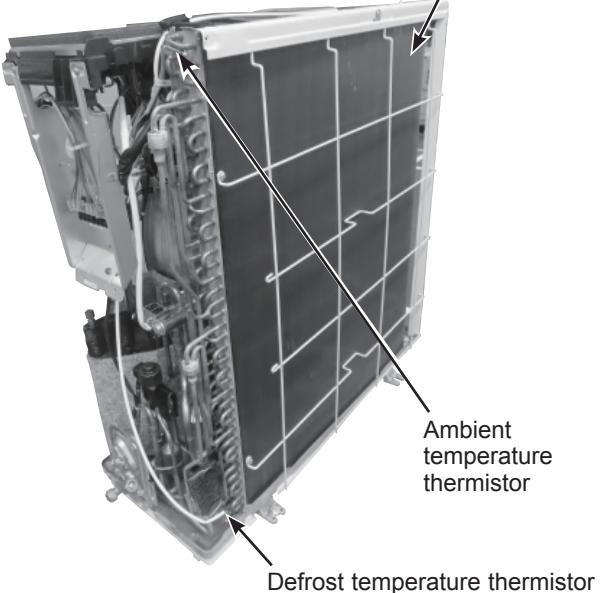
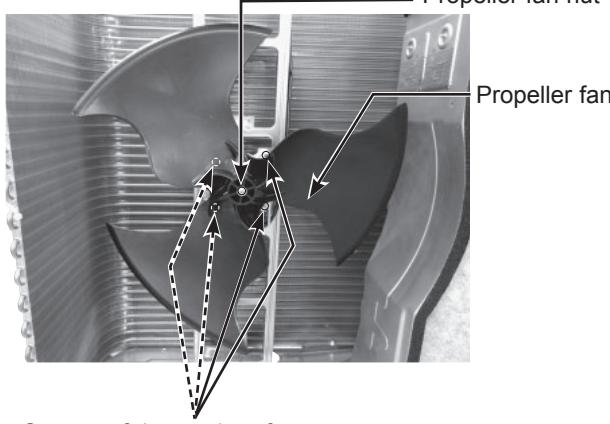
→: Indicates the visible parts in the photos/figures.
↔: Indicates the invisible parts in the photos/figures.

OPERATING PROCEDURE	PHOTOS/FIGURES
<p>1. Removing the cabinet</p> <p>(1) Remove the screws of the service panel. (2) Remove the screws of the top panel. (3) Remove the screw of the valve cover. (4) Remove the service panel. (5) Remove the top panel. (6) Remove the valve cover. (7) Remove the screws fixing the conduit cover. (Photo 3) (8) Remove the conduit cover. (9) Remove the screw fixing the conduit plate. (Photo 4) (10) Remove the conduit plate. (11) Disconnect the power supply and indoor/outdoor connecting wire. (12) Remove the screws of the cabinet. (13) Remove the cabinet. (14) Remove the screws of the back panel. (15) Remove the back panel.</p> <p>Photo 2</p> <p>Screws of the top panel</p> <p>Screws of the top panel</p> <p>Screws of the cabinet</p> <p>Screw of the valve cover</p> <p>Screws of the service panel</p> <p>Screws of the back panel</p> <p>Photo 1</p> <p>Screws of the top panel</p> <p>Screws of the top panel</p> <p>Screws of the cabinet</p>	<p>Photo 1</p> <p>Screws of the top panel</p> <p>Screws of the cabinet</p>

OPERATING PROCEDURE	PHOTOS/FIGURES
<p>2. Removing the inverter assembly, inverter P.C. board and fuse P.C. board</p> <p>2-1. Removing the inverter assembly and inverter P.C. board</p> <p>(1) Remove the top panel, cabinet and service panel. (Refer to section 1.)</p> <p>(2) Disconnect the lead wire to the reactor and the following connectors: <Inverter P.C. board> CN602 (R.V. coil) CN931, CN932 (Fan motor) CN671 (Defrost temperature thermistor, discharge temperature thermistor and outdoor heat exchanger temperature thermistor) CN672 (Ambient temperature thermistor) CN724 (Expansion valve coil) CN601 (Defrost heater and heater protector) CN64 (Compressor protector)</p> <p>(3) Remove the compressor connector (CN61).</p> <p>(4) Remove the screws fixing the heat sink support and the separator.</p> <p>(5) Remove the screws fixing the P.C. board support and the motor support.</p> <p>(6) Remove the fixing screws of the terminal block support and the back panel.</p> <p>(7) Remove the inverter assembly.</p> <p>(8) Remove the screws of the ground wires and the terminal block support.</p> <p>(9) Remove the screw of the heat sink support, and the heat sink support from the P.C. board support.</p>	<p>Photo 3 Screws of the conduit cover</p>  <p>Photo 4 Screw of the conduit plate</p> 
<p>Photo 6 (Inverter assembly)</p> 	<p>Photo 5</p> <p>Screw of the P.C. board support and the motor support</p> <p>Screw of the heat sink support and the separator</p> <p>Lead wires of the reactor</p> <p>Screws of the terminal block support and the back panel</p> <p>Connector of compressor protector</p> 

OPERATING PROCEDURE	PHOTOS/FIGURES
<p>* Connection procedure when attaching the inverter P.C. board (Photo 8, 9)</p> <ol style="list-style-type: none"> 1. Attach the heat sink support to the P.C. board support. 2. Hook the lead wires of the compressor, the reactor and the P.C. board to each hooks on the heat sink support as shown Photo 8. 3. Connect the lead wires of the expansion valve coil to the connector on the inverter P.C. board. Pull the lead wires of the expansion valve coil toward you and put them on the hook on the P.C. board support as shown in Photo 9. 4. Tighten the lead wires of the fan motor (CN931, CN932), defrost temperature thermistor, discharge temperature thermistor, outdoor heat exchanger temperature thermistor and ambient temperature thermistor with the fastener as shown in Photo 9. 	<p>Photo 7</p>  <p>Screw of the ground wire Screws of the terminal block support Screws of the ground wires and the terminal block support</p>
<p>Photo 8</p>  <p>Hook of the lead wires of the P.C. board Inverter P.C. board Hook of the lead wires of the reactor Hook of the lead wires of the compressor Inverter P.C. board support</p>	<p>Photo 9</p>  <p>Lead wires of the expansion valve coil Inverter P.C. board support Fastener</p>

OPERATING PROCEDURE	PHOTOS/FIGURES
<p>2-2. Removing the fuse P.C. board</p> <p>(1) Remove the top panel, cabinet and service panel. (Refer to section 1.)</p> <p>(2) Disconnect the lead wire to the reactor and the inverter P.C. board connectors. (Refer to section 2-1. (2))</p> <p>(3) Remove the compressor connector (CN61).</p> <p>(4) Remove the screws fixing the heat sink support and the separator.</p> <p>(5) Remove the screws fixing the P.C. board support and the motor support.</p> <p>(6) Remove the fixing screws of the terminal block support and the back panel.</p> <p>(7) Remove the inverter assembly.</p> <p>(8) Remove the following disconnected connectors: <Fuse P.C. board> CN65, CN66 (Terminal block)</p> <p>(9) Remove the fuse P.C. board from the supports. (Photo 11)</p>	<p>Photo 10</p>  <p>Photo 11</p>  <p>Pinch the stopper of the support, and push it into the hole to remove the fuse P.C. board.</p>

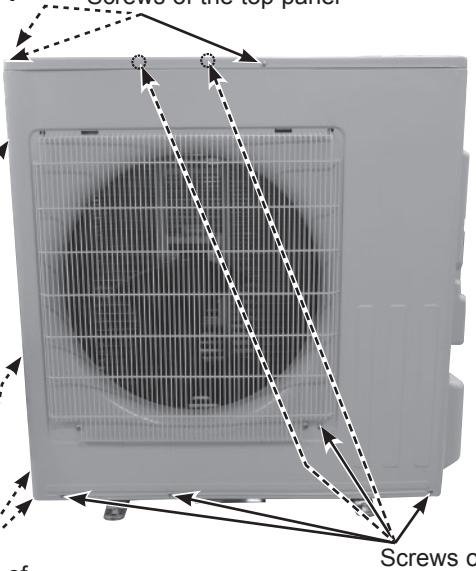
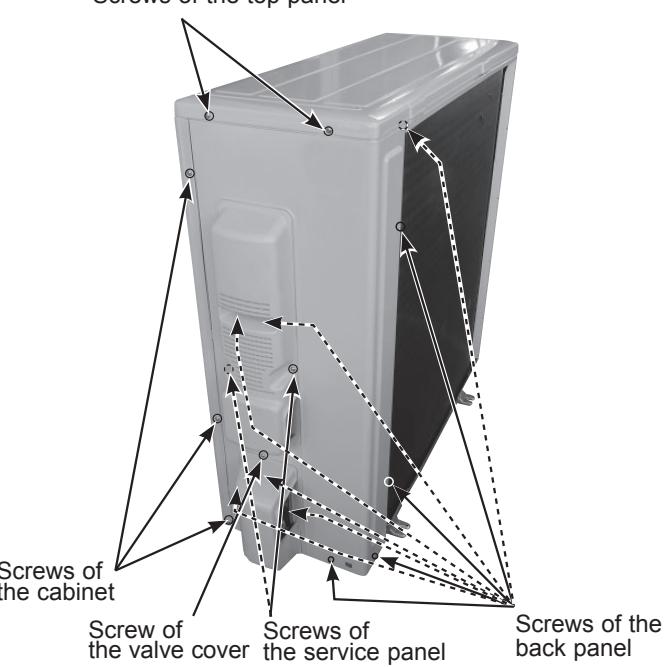
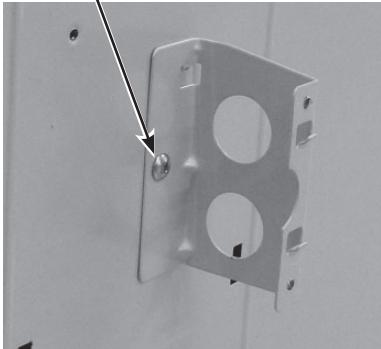
OPERATING PROCEDURE	PHOTOS/FIGURES
<p>3. Removing the discharge temperature thermistor, defrost temperature thermistor, outdoor heat exchanger temperature thermistor and ambient temperature thermistor</p> <p>(1) Remove the cabinet and panels. (Refer to section 1.) (2) Disconnect the lead wire to the reactor and the following connectors: <Inverter P.C. board> CN671 (Defrost temperature thermistor, discharge temperature thermistor and outdoor heart exchanger temperature thermistor) CN672 (Ambient temperature thermistor) (3) Pull out the discharge temperature thermistor from its holder. (Photo 14) (4) Pull out the defrost temperature thermistor from its holder. (5) Pull out the outdoor heat exchanger temperature thermistor from its holder. (Photo 12) (6) Pull out the ambient temperature thermistor from its holder.</p>	<p>Photo 12</p> 
<p>4. Removing outdoor fan motor</p> <p>(1) Remove the top panel, cabinet and service panel. (Refer to section 1.) (2) Disconnect the following connectors: <Inverter P.C. board> CN931, CN932 (Fan motor) (3) Remove the propeller fan nut. (4) Remove the propeller fan. (5) Remove the screws fixing the fan motor. (6) Remove the fan motor.</p>	<p>Photo 13</p> 

OPERATING PROCEDURE	PHOTOS/FIGURES
<p>5. Removing the compressor and 4-way valve</p> <p>(1) Remove the cabinet and panels. (Refer to section 1.) (2) Remove the inverter assembly. (Refer to section 2) (3) Remove the screws fixing the reactor. (4) Remove the reactor. (5) Remove the soundproof felt. (6) Recover gas from the refrigerant circuit.</p> <p>NOTE: Recover gas from the pipes until the pressure gauge shows 0 psig.</p> <p>(7) Detach the brazed part of the suction and the discharge pipe connected with compressor. (8) Remove the compressor nuts. (9) Remove the compressor. (10) Remove the screw fixing the R.V. coil (Photo 15) (11) Remove the R.V. coil (12) Detach the brazed parts of 4-way valve and pipe. (Photo 15)</p>	<p>Photo 14</p>
<p>Figure 1</p> <p>Attach the compressor protector to the protector holder with the surface on which the model name is printed facing the area hatched in the figure.</p>	<p>Photo 15</p>

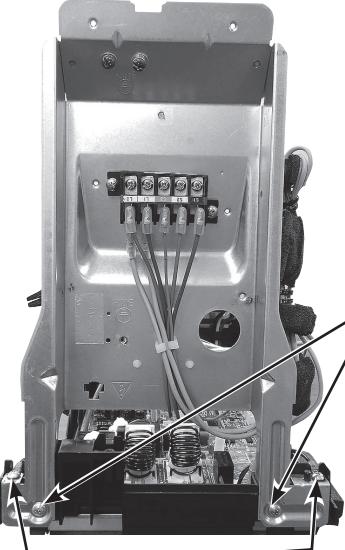
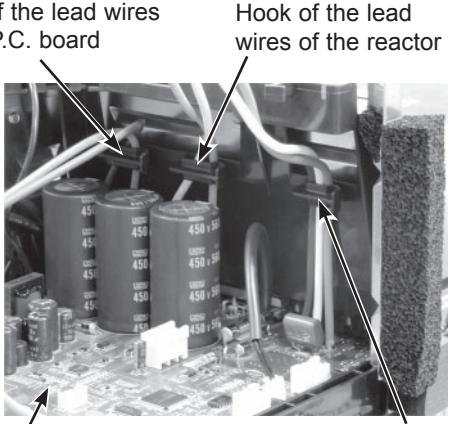
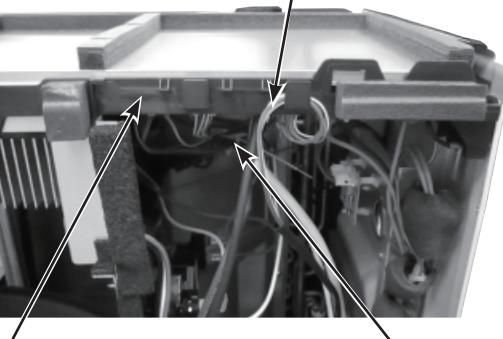
13-2. SUZ-AA24NL SUZ-AA30NL SUZ-AA36NL
SUZ-AA24NLH SUZ-AA30NLH SUZ-AA36NLH

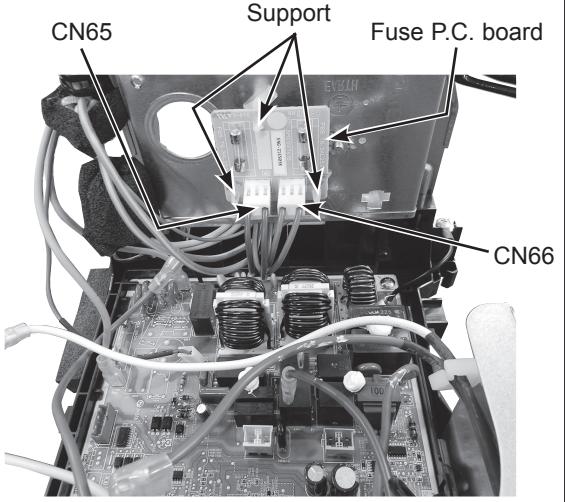
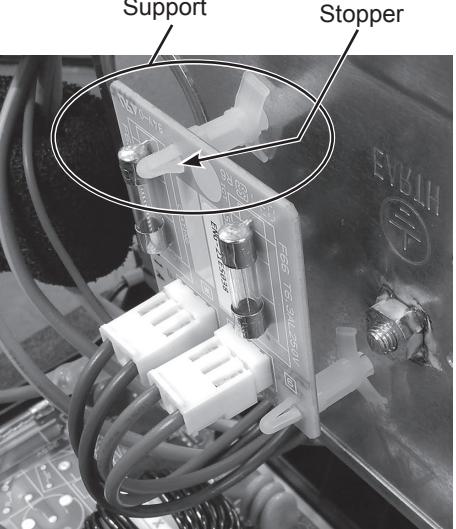
NOTE: Turn OFF the power supply before disassembly.

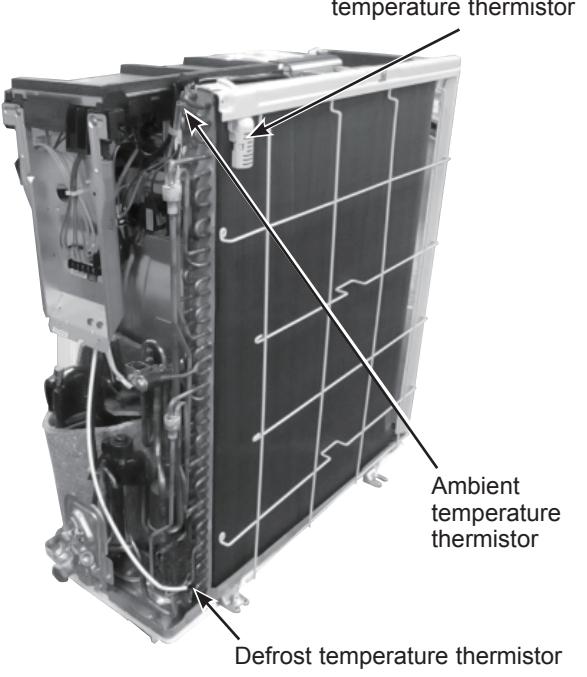
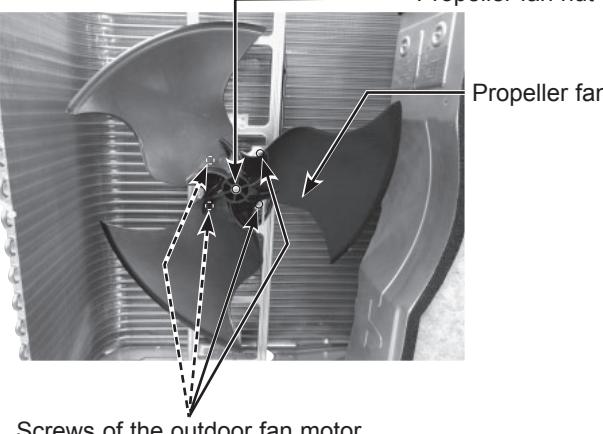
→: Indicates the visible parts in the photos/figures.
 -----→: Indicates the invisible parts in the photos/figures.

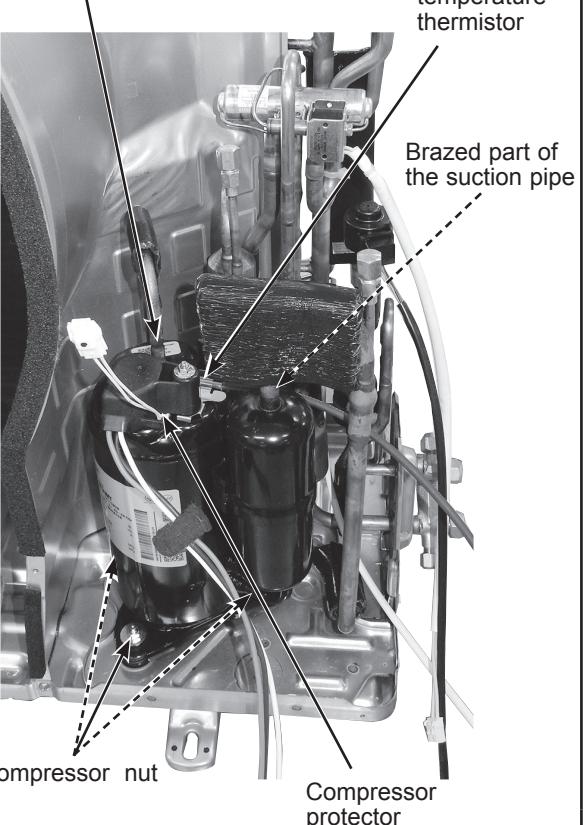
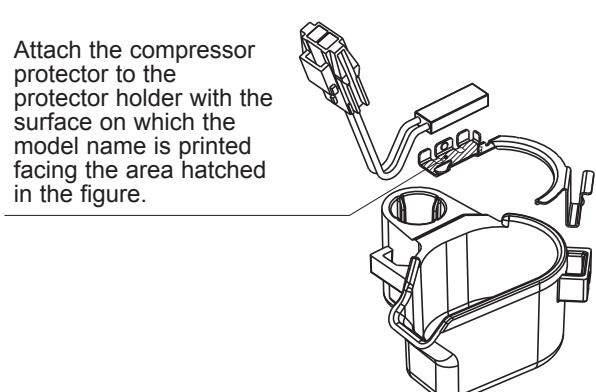
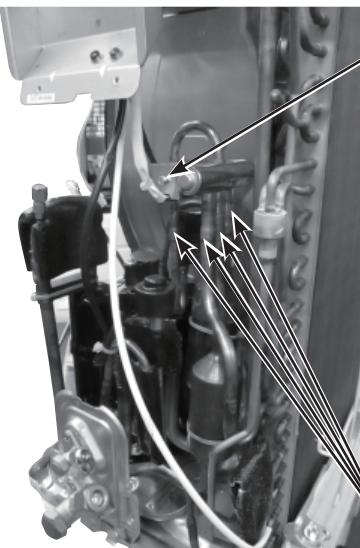
OPERATING PROCEDURE	PHOTOS/FIGURES
<p>1. Removing the cabinet</p> <p>(1) Remove the screws of the service panel. (2) Remove the screws of the top panel. (3) Remove the screw of the valve cover. (4) Remove the service panel. (5) Remove the top panel. (6) Remove the valve cover. (7) Remove the screws fixing the conduit cover. (Photo 3) (8) Remove the conduit cover. (9) Remove the screw fixing the conduit plate. (Photo 4) (10) Remove the conduit plate. (11) Disconnect the power supply and indoor/outdoor connecting wire. (12) Remove the screws of the cabinet. (13) Remove the cabinet. (14) Remove the screws of the back panel. (15) Remove the back panel.</p>	<p>Photo 1</p>  <p>Screws of the top panel Screws of the cabinet Screws of the back panel</p>
<p>Photo 2</p>  <p>Screws of the top panel Screws of the cabinet Screw of the valve cover Screws of the service panel Screws of the back panel</p>	<p>Photo 3</p>  <p>Screws of the conduit cover</p> <p>Photo 4</p>  <p>Screw of the conduit plate</p>

OPERATING PROCEDURE	PHOTOS/FIGURES
<p>2. Removing the inverter assembly, inverter P.C. board and fuse P.C. board</p> <p>2-1. Removing the inverter assembly and inverter P.C. board</p> <p>(1) Remove the top panel, cabinet and service panel. (Refer to section 1.)</p> <p>(2) Disconnect the lead wire to the reactor and the following connectors:</p> <ul style="list-style-type: none"> <Inverter P.C. board> CN602 (R.V. coil) CN931, CN932 (Fan motor) CN671 (Defrost temperature thermistor, discharge temperature thermistor and outdoor heat exchanger temperature thermistor) CN672 (Ambient temperature thermistor) CN724 (Expansion valve coil) CN601 (Defrost heater and heater protector) CN64 (Compressor protector) <p>(3) Remove the compressor connector (CN61).</p> <p>(4) Remove the screws fixing the heat sink support and the separator.</p> <p>(5) Remove the screws fixing the P.C. board support and the motor support.</p> <p>(6) Remove the fixing screws of the terminal block support and the back panel.</p> <p>(7) Remove the inverter assembly.</p> <p>(8) Remove the screws of the ground wires and the terminal block support.</p> <p>(9) Remove the screw of the heat sink support, and the heat sink support from the P.C. board support.</p>	<p>Photo 5</p> <p>Screw of the P.C. board support and the motor support</p> <p>Lead wires of the reactor</p> <p>Screws of the heat sink support and the separator</p> <p>Connector of compressor protector</p> <p>Screws of the terminal block support and the back panel</p>

OPERATING PROCEDURE	PHOTOS/FIGURES
<p>* Connection procedure when attaching the inverter P.C. board (Photo 8, 9)</p> <ol style="list-style-type: none"> 1. Attach the heat sink support to the P.C. board support. 2. Hook the lead wires of the compressor, the reactor and the P.C. board to each hooks on the heat sink support as shown Photo 8. 3. Connect the lead wires of the expansion valve coil to the connector on the inverter P.C. board. Pull the lead wires of the expansion valve coil toward you and put them on the hook on the P.C. board support as shown in Photo 9. 4. Tighten the lead wires of the fan motor (CN931, CN932), defrost temperature thermistor, discharge temperature thermistor, outdoor heat exchanger temperature thermistor and ambient temperature thermistor with the fastener as shown in Photo 9. 	<p>Photo 7</p>  <p>Screws of the terminal block support</p>
<p>Photo 8</p>  <p>Hook of the lead wires of the P.C. board</p> <p>Hook of the lead wires of the reactor</p> <p>Inverter P.C. board</p> <p>Hook of the lead wires of the compressor</p>	<p>Photo 9</p>  <p>Lead wires of the expansion valve coil</p> <p>Inverter P.C. board support</p> <p>Fastener</p>

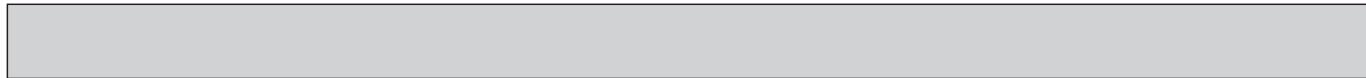
OPERATING PROCEDURE	PHOTOS/FIGURES
<p>2-2. Removing the fuse P.C. board</p> <p>(1) Remove the top panel, cabinet and service panel. (Refer to section 1.)</p> <p>(2) Disconnect the lead wire to the reactor and the inverter P.C. board connectors. (Refer to section 2-1. (2))</p> <p>(3) Remove the compressor connector (CN61).</p> <p>(4) Remove the screws fixing the heat sink support and the separator.</p> <p>(5) Remove the screws fixing the P.C. board support and the motor support.</p> <p>(6) Remove the fixing screws of the terminal block support and the back panel.</p> <p>(7) Remove the inverter assembly.</p> <p>(8) Remove the following disconnected connectors: <Fuse P.C. board> CN65, CN66 (Terminal block)</p> <p>(9) Remove the fuse P.C. board from the supports. (Photo 11)</p>	<p>Photo 10</p>  <p>Photo 11</p>  <p>Pinch the stopper of the support, and push it into the hole to remove the fuse P.C. board.</p>

OPERATING PROCEDURE	PHOTOS/FIGURES
<p>3. Removing the discharge temperature thermistor, defrost temperature thermistor, outdoor heat exchanger temperature thermistor and ambient temperature thermistor</p> <p>(1) Remove the cabinet and panels. (Refer to section 1.)</p> <p>(2) Disconnect the lead wire to the reactor and the following connectors: <Inverter P.C. board> CN671 (Defrost temperature thermistor, discharge temperature thermistor and outdoor heart exchanger temperature thermistor) CN672 (Ambient temperature thermistor)</p> <p>(3) Pull out the discharge temperature thermistor from its holder. (Photo 14)</p> <p>(4) Pull out the defrost temperature thermistor from its holder.</p> <p>(5) Pull out the outdoor heat exchanger temperature thermistor from its holder. (Photo 12)</p> <p>(6) Pull out the ambient temperature thermistor from its holder.</p>	<p>Photo 12</p> 
<p>4. Removing outdoor fan motor</p> <p>(1) Remove the top panel, cabinet and service panel. (Refer to section 1.)</p> <p>(2) Disconnect the following connectors: <Inverter P.C. board> CN931, CN932 (Fan motor)</p> <p>(3) Remove the propeller fan nut.</p> <p>(4) Remove the propeller fan.</p> <p>(5) Remove the screws fixing the fan motor.</p> <p>(6) Remove the fan motor.</p>	<p>Photo 13</p> 

OPERATING PROCEDURE	PHOTOS/FIGURES
<p>5. Removing the compressor and 4-way valve</p> <p>(1) Remove the cabinet and panels. (Refer to section 1.) (2) Remove the inverter assembly. (Refer to section 2) (3) Remove the screws fixing the reactor. (4) Remove the reactor. (5) Remove the soundproof felt. (6) Recover gas from the refrigerant circuit.</p> <p>NOTE: Recover gas from the pipes until the pressure gauge shows 0 psig.</p> <p>(7) Detach the brazed part of the suction and the discharge pipe connected with compressor. (8) Remove the compressor nuts. (9) Remove the compressor. (10) Remove the screw fixing the R.V. coil (Photo 15) (11) Remove the R.V. coil (12) Detach the brazed parts of 4-way valve and pipe. (Photo 15)</p>	<p>Photo 14</p>  <p>Brazed part of the discharge pipe Discharge temperature thermistor Brazed part of the suction pipe Compressor nut Compressor protector</p>
<p>Figure 1</p>  <p>Attach the compressor protector to the protector holder with the surface on which the model name is printed facing the area hatched in the figure.</p>	<p>Photo 15</p>  <p>Screw of the R.V. coil Brazed parts of 4-way valve</p>

Model name		Indoor unit Outdoor unit	SLZ-AF09NL SUZ-AA09NLHZ	SLZ-AF12NL SUZ-AA12NLHZ	SLZ-AF15NL SUZ-AA15NLHZ	SLZ-AF18NL SUZ-AA18NLHZ		
Cooling	at 95°F	Max. Capacity	Btu/h	9,000	12,000	15,000		
		Rated Capacity ^{*1}	Btu/h	9,000	12,000	15,000		
		Min. Capacity	Btu/h	5,200	5,200	5,300		
		Total Input	W	720	860	1,180		
		EER2	Btu/h/W	12.5	13.9	12.7		
		Moisture Removal	Pints/h	1.0	2.1	3.3		
		SHF		0.88	0.81	0.76		
		Power factor	%	95	95	99		
		SEER2	Btu/h/W	16.6	16.8	17.0		
						17.5		
Heating	at 47°F	Max. Capacity	Btu/h	14,600	16,900	19,000		
		Rated Capacity	Btu/h	12,000	15,000	17,000		
		Min. Capacity	Btu/h	7,700	7,700	7,800		
		Total Input	W	1,020	1,290	1,500		
		COP	W/W	3.40	3.40	3.30		
		Power factor	%	93	98	98		
		Rated Capacity	Btu/h	7,500	9,600	11,000		
		Total Input	W	930	1,130	1,310		
		COP	W/W	2.3	2.4	2.4		
		HSPF2(IV/V)	Btu/h/W	9.3	9.4	9.2		
Power supply	Phase,Cycle,Voltage			1-phase, 60 Hz, 208/230 V				
	Breaker size	A	25		30			
Voltage	Indoor - Outdoor S1-S2			AC208 V / 230 V				
	Indoor - Outdoor S2-S3			DC24 V				
	Indoor - Remote controller			DC12 V				
Indoor unit	MCA	A		1.0				
	MOCP	A		15				
	Fan Motor Output	W		50				
	Air flow(LoLo-Lo-Mid-Hi)	DRY (CFM)	230-265-300	230-280-335	245-315-405	300-420-475		
		WET (CFM)	207-239-270	207-252-302	221-284-365	270-378-429		
	External Static Pressure	in. WG [Pa]		0				
	Sound Pressure Level (LoLo-Lo-Mid-Hi)	dB(A)	25-28-31	25-30-34	27-34-39	32-40-43		
	Dimensions	W:mm [inch] D:mm [inch] H:mm [inch]		570 [22-7/16] 570 [22-7/16] 208 [8-4/16]				
	Weight Unit	kg [lbs]		14 [31]				
	Field Drain pipe size	mm [inch]		32 [1-1/4]				
RemoteController	Refrigerant pipe size Gas	mm [inch]	9.52 [3/8]		12.7 [1/2]			
	Refrigerant pipe size Liquid	mm [inch]		6.35 [1/4]				
Outdoor unit						Attached in Indoor Unit		
	MCA	A	24		25			
	MOCP	A	41		42			
	SCCR	kA		5				
	Inverter input	A		17.2				
	Fan Motor Output	W		50				
	Compressor	Model		SRB172FQHMT				
	Air flow	CFM		2,193/1,949				
	Refrigerant Control			Electronic Expansion Valve				
	Defrost Method			Reverse Cycle				
Refrigerant	Sound Pressure Level at cooling	dB(A)		54				
	Sound Pressure Level at heating	dB(A)		55				
	External Finish Color			Ivory Munsell 3Y 7.8/1.1				
	Dimensions	W: mm [inch] D: mm [inch] H: mm [inch]		840 [33-1/16] 330 [13] 880 [34-10/16]				
	Weight Unit	kg [lbs]		52.16 [115]				
	Type			R454B				
	Charge	kg [lbs,oz]		1.35 [2 lbs + 16 oz]				
	Oil	Model		RM68EH				
		L [oz]		0.43 [14.6]				
	Gas side O.D.	mm [inch]	9.52 [3/8]		12.7 [1/2]			
Refrigerant Pipe Size	Liquid side O.D.	mm [inch]		6.35 [1/4]				
	Height difference			15 [50]				
Refrigerant pipe length	Length			30 [100]				
	Refrigerant Piping			Not supplied				
Connection Method	Indoor/Outdoor			Flared				

NOTES: *1.Rating conditions (cooling)-Indoor : D.B. 26.7°C(80°F), W.B. 19.4°C(67°F) Outdoor : D.B. 35°C(95°F), W.B. 23.9°C(75°F)



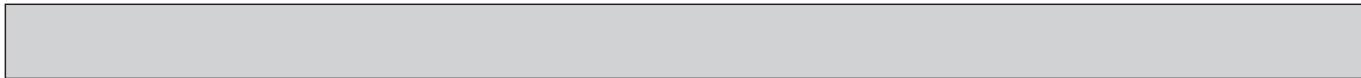
Model name		Indoor unit	MLZ-KX09NL SUZ-AA09NLHZ	MLZ-KX12NL SUZ-AA12NLHZ	MLZ-KX18NL SUZ-AA18NLHZ
Cooling	at 95°F	Max. Capacity	Btu/h	9,000	12,000
		Rated Capacity ¹⁾	Btu/h	9,000	12,000
		Min. Capacity	Btu/h	5,100	5,100
		Total Input	W	730	900
		EER2	Btu/h/W	12.3	13.3
		Moisture Removal	Pints/h	1.6	2.9
		SHF		0.81	0.73
		Power factor	%	91	96
		SEER2	Btu/h/W	16.7	16.7
Heating	at 47°F	Max. Capacity	Btu/h	14,500	18,000
		Rated Capacity	Btu/h	11,400	15,000
		Min. Capacity	Btu/h	8,000	8,000
		Total Input	W	960	1,330
		COP	W/W	3.4	3.3
		Power factor	%	95	96
	at 17°F	Rated Capacity	Btu/h	7,000	9,500
		Total Input	W	890	1,140
		COP	W/W	2.3	2.4
Power supply	HSPF2(IV/V)		Btu/h/W	9.7	9.6
	Phase,Cycle,Voltage			1-phase, 60 Hz, 208/230 V	
Voltage	Breaker size		A	25	30
	Indoor - Outdoor S1-S2			AC208 V / 230 V	
	Indoor - Outdoor S2-S3			DC24 V	
Indoor unit	Indoor - Remote controller			DC12 V	
	MCA	A		1	
	MOCP	A		15	
	Fan Motor Output	W		30	
	Air flow(LoLo-Lo-Mid-Hi)	DRY (CFM)	212-247-290-325	212-272-311-350	212-311-364-417
	External Static Pressure	in. WG [Pa]		0	
	Sound Pressure Level (LoLo-Lo-Mid-Hi)	dB(A)	27-31-34-38	27-32-36-40	29-37-42-48
	Dimensions	W:mm [inch]		1102 [43-3/8]	
		D:mm [inch]		360 [14-3/16]	
		H:mm [inch]		185 [7-5/16]	
	Weight Unit	kg [lbs]		15.5 [34]	
	Field Drain pipe size	mm [inch]		15 [5/8]	
	Refrigerant pipe size Gas	mm [inch]	9.52 [3/8]		12.7 [1/2]
	Refrigerant pipe size Liquid	mm [inch]		6.35 [1/4]	
Outdoor unit	RemoteController			Attached in Indoor Unit	
	MCA	A	24		25
	MOCP	A	41		42
	SCCR	kA		5	
	Inverter input	A		17.2	
	Fan Motor Output	W		50	
	Compressor	Model		SRB172FQHMT	
	Air flow	CFM		2,193/1,949	
	Refrigerant Control			Electronic Expansion Valve	
	Defrost Method			Reverse Cycle	
Refrigerant	Sound Pressure Level at cooling	dB(A)		54	
	Sound Pressure Level at heating	dB(A)		55	
	External Finish Color			Ivory Munsell 3Y 7.8/1.1	
	Dimensions	W: mm [inch]		840 [33-1/16]	
		D: mm [inch]		330 [13]	
		H: mm [inch]		880 [34-10/16]	
	Weight Unit	kg [lbs]		56.16 [115]	
Refrigerant	Type			R454B	
	Charge	kg [lbs.oz]		1.35 [2 lbs + 16 oz]	
	Oil	Model		RM68EH	
		L [oz]		0.43 [14.6]	
Refrigerant	Gas side O.D.	mm [inch]	9.52 [3/8]		12.7 [1/2]
	Pipe Size	Liquid side O.D.	mm [inch]	6.35 [1/4]	
	Refrigerant	Height difference		15 [50]	
pipe length	Length			30 [100]	
	Refrigerant Piping			Not supplied	
Connection Method	Indoor/Outdoor			Flared	

NOTES: *1.Rating conditions (cooling)-Indoor : D.B. 26.7°C(80°F), W.B. 19.4°C(67°F) Outdoor : D.B. 35°C(95°F), W.B. 23.9°C(75°F)

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Model name		Indoor unit	MFZ-KX09NL SUZ-AA09NLHZ	MFZ-KX12NL SUZ-AA12NLHZ	MFZ-KX15NL SUZ-AA15NLHZ	MFZ-KX18NL SUZ-AA18NLHZ
Cooling	at 95°F	Max. Capacity	Btu/h	9,000	12,000	15,000
		Rated Capacity ^{*1}	Btu/h	9,000	12,000	15,000
		Min. Capacity	Btu/h	5,000	5,000	5,200
		Total Input	W	720	860	1,170
		EER2	Btu/h/W	12.5	13.9	12.8
		Moisture Removal	Pints/h	0.4	2.0	2.9
		SHF		0.96	0.82	0.78
		Power factor	%	91	96	92
		SEER2	Btu/h/W	17.0	17.2	17.3
Heating	at 47°F	Max. Capacity	Btu/h	15,000	18,000	19,000
		Rated Capacity	Btu/h	12,000	15,000	17,000
		Min. Capacity	Btu/h	8,300	8,300	8,500
		Total Input	W	910	1,170	1,270
		COP	W/W	3.8	3.7	3.9
		Power factor	%	95	97	97
		Rated Capacity	Btu/h	7,300	9,300	10,900
		Total Input	W	870	1,050	1,170
		COP	W/W	2.4	2.5	2.7
Power supply	HSPF2(IV/V)		Btu/h/W	10.0	10.0	10.0
		Phase,Cycle,Voltage			1-phase, 60 Hz, 208/230 V	
Voltage	Breaker size	A		25		30
	Indoor - Outdoor S1-S2				AC208 V / 230 V	
	Indoor - Outdoor S2-S3				DC24 V	
Indoor unit	Indoor - Remote controller				DC12 V	
	MCA	A			1.0	
	MOCP	A			15	
	Fan Motor Output	W			30	
	Air flow(LoLo-Mid-Hi)	DRY (CFM)		138-191-254-328		212-268-328-399
		WET (CFM)		138-198-272-360		198-254-311-392
	External Static Pressure	in. WG [Pa]			0	
	Sound Pressure Level (LoLo-Mid-Hi)	dB(A)		21-27-34-41		29-35-40-45
	Dimensions	W:mm [inch] D:mm [inch] H:mm [inch]			750 [29-9/16] 215 [8-8/16] 600 [23-10/16]	
	Weight Unit	kg [lbs]			15 [33]	
RemoteController	Field Drain pipe size	mm [inch]			15 [5/8]	
	Refrigerant pipe size Gas	mm [inch]		9.52 [3/8]		12.7 [1/2]
	Refrigerant pipe size Liquid	mm [inch]			6.35 [1/4]	
					Attached in Indoor Unit	
	MCA	A	24		25	
	MOCP	A	41		42	
	SCCR	kA			5	
	Inverter input	A			17.2	
	Fan Motor Output	W			50	
Outdoor unit	Compressor	Model			SRB172FQHMT	
	Air flow	CFM			2,193/1,949	
	Refrigerant Control				Electronic Expansion Valve	
	Defrost Method				Reverse Cycle	
	Sound Pressure Level at cooling	dB(A)			54	
	Sound Pressure Level at heating	dB(A)			55	
	External Finish Color				Ivory Munsell 3Y 7.8/1.1	
	Dimensions	W: mm [inch] D: mm [inch] H: mm [inch]			840 [33-1/16] 330 [13] 880 [34-10/16]	
	Weight Unit	kg [lbs]			56.16 [115]	
Refrigerant	Type				R454B	
	Charge	kg [lbs,oz]			1.35 [2 lbs + 16 oz]	
	Oil	Model			RM68EH	
		L [oz]			0.43 [14.6]	
	Gas side O.D.	mm [inch]	9.52 [3/8]			12.7 [1/2]
Refrigerant	Pipe Size	Liquid side O.D.	mm [inch]		6.35 [1/4]	
	Refrigerant	Height difference			15 [50]	
	pipe length	Length			30 [100]	
Refrigerant Piping					Not supplied	
Connection	Indoor/Outdoor				Flared	
Method						

NOTES: *1.Rating conditions (cooling)-Indoor : D.B. 26.7°C(80°F), W.B. 19.4°C(67°F) Outdoor : D.B. 35°C(95°F), W.B. 23.9°C(75°F)



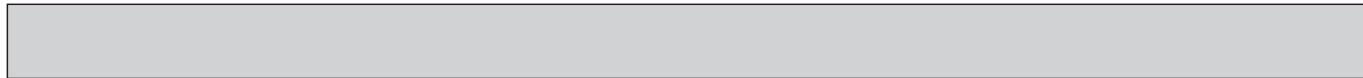
Model name		Indoor unit	MSZ-EX09NL SUZ-AA09NLHZ	MSZ-EX12NL SUZ-AA12NLHZ	MSZ-EX15NL SUZ-AA15NLHZ	MSZ-EX18NL SUZ-AA18NLHZ		
Cooling	at 95°F	Max. Capacity	Btu/h	9,000	12,000	15,000		
		Rated Capacity ^{*1}	Btu/h	9,000	12,000	15,000		
		Min. Capacity	Btu/h	4,800	4,800	5,000		
		Total Input	W	710	850	1,260		
		EER2	Btu/h/W	12.6	14.1	11.9		
		Moisture Removal	Pints/h	0.3	1.9	3.6		
		SHF		0.96	0.82	0.73		
		Power factor	%	91	99	97		
		SEER2	Btu/h/W	17.4	17.6	17.5		
Heating	at 47°F	Max. Capacity	Btu/h	15,000	18,000	19,300		
		Rated Capacity	Btu/h	12,000	15,000	17,000		
		Min. Capacity	Btu/h	8,300	8,300	8,400		
		Total Input	W	900	1,150	1,330		
		COP	W/W	3.9	3.8	3.7		
		Power factor	%	94	95	95		
	at 17°F	Rated Capacity	Btu/h	7,300	9,400	10,900		
		Total Input	W	860	1,040	1,210		
		COP	W/W	2.4	2.6	2.6		
Power supply	HSPF2(IV/V)		Btu/h/W	10.0	10.0	9.8		
	Phase,Cycle,Voltage			1-phase, 60 Hz, 208/230 V				
Voltage	Breaker size		A	25	30			
	Indoor - Outdoor S1-S2			AC208 V / 230 V				
	Indoor - Outdoor S2-S3			DC24 V				
Indoor unit	Indoor - Remote controller			DC12 V				
	MCA		A	1.0				
	MOCP		A	15				
	Fan Motor Output		W	30				
	Air flow(LoLo-Lo-Mid-Hi)	DRY (CFM)		141-162-204-243	197-226-282-346	233-264-314-346		
		WET (CFM)		127-148-204-275	187-215-250-296	187-222-257-307		
	External Static Pressure	in. WG [Pa]		0				
	Sound Pressure Level (LoLo-Lo-Mid-Hi)	dB(A)	21-24-29-37	21-24-30-38	28-31-25-41	30-33-37-43		
	Dimensions	W:mm [inch]		884 [34-13/16]				
		D:mm [inch]		195 [7-11/16]				
		H:mm [inch]		298 [11-12/16]				
	Weight Unit	kg [lbs]		11.5 [26]				
	Field Drain pipe size	mm [inch]		15.9 [11/16]				
	Refrigerant pipe size Gas	mm [inch]	9.52 [3/8]		12.7 [1/2]			
	Refrigerant pipe size Liquid	mm [inch]		6.35 [1/4]				
RemoteController			Attached in Indoor Unit					
	MCA		A	24	25			
	MOCP		A	41	42			
	SCCR		kA		5			
	Inverter input		A		17.2			
	Fan Motor Output		W		50			
	Compressor	Model		SRB172FQHMT				
	Air flow	CFM		2,193/1,949				
	Refrigerant Control			Electronic Expansion Valve				
	Defrost Method			Reverse Cycle				
	Sound Pressure Level at cooling	dB(A)		54				
	Sound Pressure Level at heating	dB(A)		55				
	External Finish Color			Ivory Munsell 3Y 7.8/1.1				
	Dimensions	W: mm [inch]		840 [33-1/16]				
Refrigerant		D: mm [inch]		330 [13]				
		H: mm [inch]		880 [34-10/16]				
	Weight Unit	kg [lbs]		56.16 [115]				
	Type			R454B				
Refrigerant	Charge	kg [lbs,oz]		1.35 [2 lbs + 16 oz]				
	Oil	Model		RM68EH				
		L [oz]		0.43 [14.6]				
	Gas side O.D.	mm [inch]	9.52 [3/8]		12.7 [1/2]			
Pipe Size	Liquid side O.D.	mm [inch]		6.35 [1/4]				
	Height difference			15 [50]				
Refrigerant pipe length	Length			30 [100]				
	Refrigerant Piping			Not supplied				
Connection Method	Indoor/Outdoor			Flared				

NOTES: *1.Rating conditions (cooling)-Indoor : D.B. 26.7°C(80°F), W.B. 19.4°C(67°F) Outdoor : D.B. 35°C(95°F), W.B. 23.9°C(75°F)

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Model name		Indoor unit	SEZ-AD09NL SUZ-AA09NLHZ	SEZ-AD12NL SUZ-AA12NLHZ	SEZ-AD15NL SUZ-AA15NLHZ	SEZ-AD18NL SUZ-AA18NLHZ
Cooling	at 95°F	Max. Capacity	Btu/h	9,000	12,000	15,000
		Rated Capacity ¹⁾	Btu/h	9,000	12,000	15,000
		Min. Capacity	Btu/h	4,800	5,100	5,700
		Total Input	W	760	900	1,220
		EER2	Btu/h/W	11.8	13.3	12.2
		Moisture Removal	Pints/h	2.0	2.5	2.8
		SHF		0.75	0.77	0.80
		Power factor	%	97	97	94
		SEER2	Btu/h/W	14.8	16.2	16.2
						17.0
Heating	at 47°F	Max. Capacity	Btu/h	14,000	18,000	20,000
		Rated Capacity	Btu/h	12,000	15,000	18,000
		Min. Capacity	Btu/h	10,500	7,800	8,200
		Total Input	W	1,210	1,240	1,430
		COP	W/W	2.9	3.5	3.6
		Power factor	%	98	99	99
		Rated Capacity	Btu/h	7,400	9,500	11,700
		Total Input	W	1,050	1,110	1,310
		COP	W/W	2.0	2.5	2.6
		HSPF2(IV/V)	Btu/h/W	8.1	9.4	9.8
Power supply	Phase,Cycle,Voltage			1-phase, 60 Hz, 208/230 V		
	Breaker size	A	25		30	
Voltage	Indoor - Outdoor S1-S2			AC208 V / 230 V		
	Indoor - Outdoor S2-S3			DC24 V		
	Indoor - Remote controller			DC12 V		
Indoor unit	MCA	A	0.95	1.05	1.35	1.38
	MOCP	A		15		
	Fan Motor Output	W		96		
	Air flow(LoLo-Lo-Mid-Hi)	DRY (CFM)	194-247-317	247-317-388	353-441-529	423-529-635
		WET (CFM)			-	
	External Static Pressure	in. WG [Pa]		5-15-35-50 [0.02-0.06-0.14-0.20]		
	Sound Pressure Level (LoLo-Lo-Mid-Hi)	dB(A)	23-26-30	23-28-33	30-34-37	30-34-38
		W:mm [inch]	790 [31-1/8]	990 [39]	990 [39]	1190 [46-7/8]
	Dimensions	D:mm [inch]		700 [27-9/16]		
		H:mm [inch]		200 [7-7/8]		
RemoteController	Weight Unit	kg [lbs]	19 [42]	22.5 [50]	23.5 [52]	27 [60]
	Field Drain pipe size	mm [inch]		32 [1-1/4]		
	Refrigerant pipe size Gas	mm [inch]	9.52 [3/8]		12.7 [1/2]	
	Refrigerant pipe size Liquid	mm [inch]		6.35 [1/4]		
					Attached in Indoor Unit	
	MCA	A	24		25	
	MOCP	A	41		42	
	SCCR	kA		5		
	Inverter input	A		17.2		
	Fan Motor Output	W		50		
Outdoor unit	Compressor	Model		SRB172FQHMT		
	Air flow	CFM		2,193/1,949		
	Refrigerant Control			Electronic Expansion Valve		
	Defrost Method			Reverse Cycle		
	Sound Pressure Level at cooling	dB(A)		54		
	Sound Pressure Level at heating	dB(A)		55		
	External Finish Color			Ivory Munsell 3Y 7.8/1.1		
	Dimensions	W: mm [inch]		840 [33-1/16]		
		D: mm [inch]		330 [13]		
		H: mm [inch]		880 [34-10/16]		
Refrigerant	Weight Unit	kg [lbs]		56.16 [115]		
	Type			R454B		
	Charge	kg [lbs,oz]		1.35 [2 lbs + 16 oz]		
	Oil	Model		RM68EH		
Refrigerant		L [oz]		0.43 [14.6]		
	Gas side O.D.	mm [inch]	9.52 [3/8]		12.7 [1/2]	
	Pipe Size	mm [inch]		6.35 [1/4]		
	Height difference			15 [50]		
Refrigerant pipe length	Length			30 [100]		
					Not supplied	
Refrigerant Piping						
	Connection Method	Indoor/Outdoor		Flared		

NOTES: *1.Rating conditions (cooling)-Indoor : D.B. 26.7°C(80°F), W.B. 19.4°C(67°F) Outdoor : D.B. 35°C(95°F), W.B. 23.9°C(75°F)



Model name		Indoor unit Outdoor unit	PEAD-AA09NL SUZ-AA09NLHZ	PEAD-AA12NL SUZ-AA12NLHZ	PEAD-AA15NL SUZ-AA15NLHZ	PEAD-AA18NL SUZ-AA18NLHZ
Cooling	at 95°F	Max. Capacity	Btu/h	9,000	12,000	15,000
		Rated Capacity ¹⁾	Btu/h	9,000	12,000	15,000
		Min. Capacity	Btu/h	5,300	5,500	5,900
		Total Input	W	750	880	1,150
		EER2	Btu/h/W	12.0	13.6	13.0
		Moisture Removal	Pints/h	0.6	1.3	1.7
		SHF		0.93	0.87	0.88
		Power factor	%	85	94	97
		SEER2	Btu/h/W	15.8	17.0	17.3
Heating	at 47°F	Max. Capacity	Btu/h	14,700	18,000	20,400
		Rated Capacity	Btu/h	12,000	15,000	18,000
		Min. Capacity	Btu/h	7,800	8,000	8,400
		Total Input	W	1,010	1,200	1,290
		COP	W/W	3.4	3.6	4.0
		Power factor	%	88	98	97
	at 17°F	Rated Capacity	Btu/h	7,400	9,300	11,600
		Total Input	W	940	1,090	1,220
		COP	W/W	2.3	2.5	2.7
		HSPF2(IV/V)	Btu/h/W	9.1	9.5	10.2
Power supply	Phase,Cycle,Voltage			1-phase, 60 Hz, 208/230 V		
	Breaker size	A	25		30	
Voltage	Indoor - Outdoor S1-S2			AC208 V / 230 V		
	Indoor - Outdoor S2-S3			DC24 V		
	Indoor - Remote controller			DC12 V		
Indoor unit	MCA	A	2.13	2.50	2.25	2.25
	MOCP	A		15		
	Fan Motor Output	W		121		
	Air flow(LoLo-Lo-Mid-Hi)	DRY (CFM)	265-283-318-353	353-388-424-494	403-424-512-600	403-424-512-600
		WET (CFM)		-		
	External Static Pressure	in. WG [Pa]		0.14-0.20-0.28-0.40-0.60	[35-50-70-100-150]	
	Sound Pressure Level (LoLo-Lo-Mid-Hi)	dB(A)	25-26-28-31	27-29-31-34	28-29-34-37	28-29-34-37
		W:mm [inch]		900 [35-7/16]		
	Dimensions	D:mm [inch]		732 [28-7/8]		
		H:mm [inch]		250 [9-7/8]		
	Weight Unit	kg [lbs]	26 [58]		27 [60]	
	Field Drain pipe size	mm [inch]		32 [1-1/4]		
	Refrigerant pipe size Gas	mm [inch]	9.52 [3/8]		12.7 [1/2]	
	Refrigerant pipe size Liquid	mm [inch]		6.35 [1/4]		
RemoteController				Attached in Indoor Unit		
	MCA	A	24		25	
	MOCP	A	41		42	
	SCCR	kA		5		
	Inverter input	A		17.2		
	Fan Motor Output	W		50		
	Compressor	Model		SRB172FQHMT		
	Air flow	CFM		2,193/1,949		
	Refrigerant Control			Electronic Expansion Valve		
	Defrost Method			Reverse Cycle		
	Sound Pressure Level at cooling	dB(A)		54		
	Sound Pressure Level at heating	dB(A)		55		
	External Finish Color			Ivory Munsell 3Y 7.8/1.1		
	Dimensions	W: mm [inch]		840 [33-1/16]		
		D: mm [inch]		330 [13]		
		H: mm [inch]		880 [34-10/16]		
Refrigerant	Weight Unit	kg [lbs]		56.16 [115]		
	Type			R454B		
	Charge	kg [lbs,oz]		1.35 [2 lbs + 16 oz]		
	Oil	Model		RM68EH		
		L [oz]		0.43 [14.6]		
Refrigerant	Gas side O.D.	mm [inch]	9.52 [3/8]		12.7 [1/2]	
	Pipe Size	Liquid side O.D.	mm [inch]	6.35 [1/4]		
	Refrigerant pipe length	Height difference		15 [50]		
		Length		30 [100]		
Refrigerant Piping				Not supplied		
Connection Method	Indoor/Outdoor			Flared		

NOTES: *1.Rating conditions (cooling)-Indoor : D.B. 26.7°C(80°F), W.B. 19.4°C(67°F) Outdoor : D.B. 35°C(95°F), W.B. 23.9°C(75°F)

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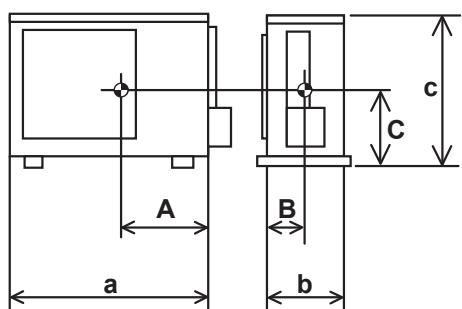
Model name		Indoor unit	SVZ-AP12NL SUZ-AA12NLHZ	SVZ-AP18NL SUZ-AA18NLHZ
Cooling	at 95°F	Max. Capacity	Btu/h	12,000
		Rated Capacity ¹⁾	Btu/h	12,000
		Min. Capacity	Btu/h	5,400
		Total Input	W	950
		EER2	Btu/h/W	12.6
		Moisture Removal	Pints/h	1.2
		SHF		0.89
		Power factor	%	98
		SEER2	Btu/h/W	16.1
				16.2
Heating	at 47°F	Max. Capacity	Btu/h	18,000
		Rated Capacity	Btu/h	15,000
		Min. Capacity	Btu/h	8,000
		Total Input	W	1,200
		COP	W/W	3.6
		Power factor	%	99
		Rated Capacity	Btu/h	9,300
		Total Input	W	1,110
		COP	W/W	2.4
		HSPF2(IV/V)	Btu/h/W	9.3
Power supply	Phase,Cycle,Voltage			1-phase, 60 Hz, 208/230 V
	Breaker size	A		30
Voltage	Indoor - Outdoor S1-S2			AC208 V / 230 V
	Indoor - Outdoor S2-S3			DC24 V
	Indoor - Remote controller			DC12 V
Indoor unit	MCA	A		3.00
	MOCP	A		15
	Fan Motor Output	W		2.4
	Air flow(LoLo-Lo-Mid-Hi)	DRY (CFM)	278-381-448	471-573-675
	External Static Pressure	in. WG [Pa]		0.3-0.5-0.8
	Sound Pressure Level (LoLo-Lo-Mid-Hi)	dB(A)		36-41-45
	Dimensions	W:mm [inch] D:mm [inch] H:mm [inch]		432 [17] 548 [21-5/8] 1011 [39-13/16]
	Weight Unit	kg [lbs]		44 [97]
	Field Drain pipe size	mm [inch]		19.05 [3/4]
	Refrigerant pipe size Gas	mm [inch]	9.52 [3/8]	12.7 [1/2]
	Refrigerant pipe size Liquid	mm [inch]		6.35 [1/4]
RemoteController				Attached in Indoor Unit
Outdoor unit	MCA	A		25
	MOCP	A		42
	SCCR	kA		5
	Inverter input	A		17.2
	Fan Motor Output	W		50
	Compressor	Model		SRB172FQHMT
	Air flow	CFM		2,193/1,949
	Refrigerant Control			Electronic Expansion Valve
	Defrost Method			Reverse Cycle
	Sound Pressure Level at cooling	dB(A)		54
Refrigerant	Sound Pressure Level at heating	dB(A)		55
	External Finish Color			Ivory Munsell 3Y 7.8/1.1
	Dimensions	W: mm [inch] D: mm [inch] H: mm [inch]		840 [33-1/16] 330 [13] 880 [34-10/16]
	Weight Unit	kg [lbs]		56.16 [115]
	Type			R454B
	Charge	kg [lbs.oz]		1.35 [2 lbs + 16 oz]
	Oil	Model		RM68EH
		L [oz]		0.43 [14.6]
	Gas side O.D.	mm [inch]	9.52 [3/8]	12.7 [1/2]
	Pipe Size	Liquid side O.D.	mm [inch]	6.35 [1/4]
Refrigerant	Height difference			15 [50]
	pipe length	Length		30 [100]
Refrigerant Piping				Not supplied
Connection Method	Indoor/Outdoor			Flared

NOTES: *1.Rating conditions (cooling)-Indoor : D.B. 26.7°C(80°F), W.B. 19.4°C(67°F) Outdoor : D.B. 35°C(95°F), W.B. 23.9°C(75°F)

T2

POSITION OF THE CENTER OF GRAVITY

T2-1. OUTDOOR UNIT

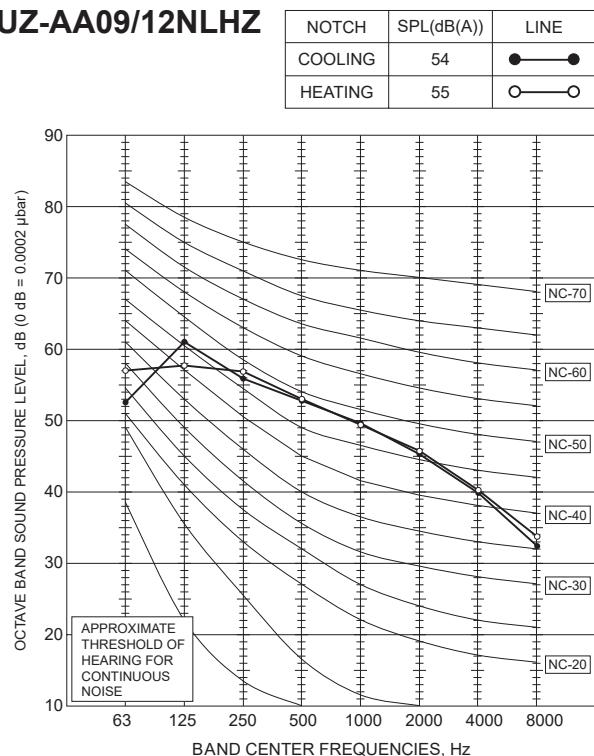
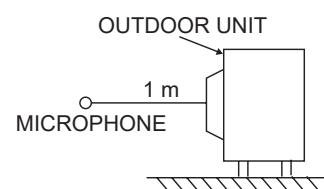
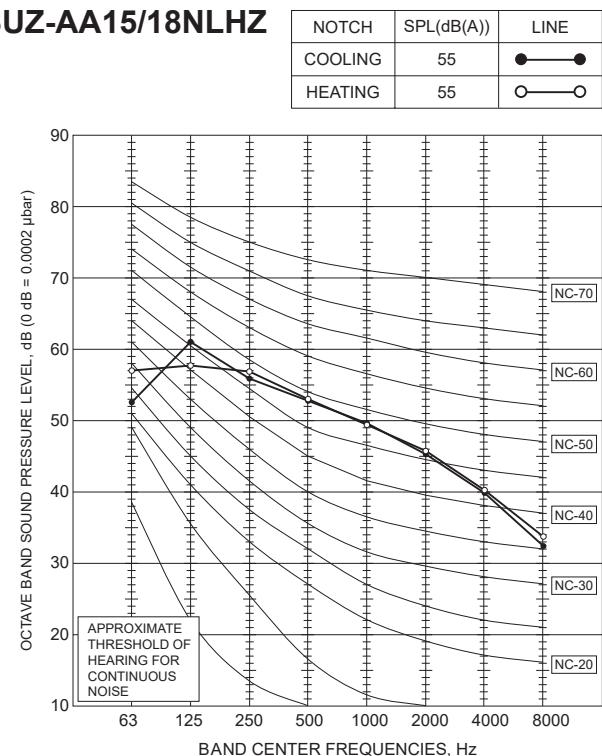


Unit: inch(mm)

Model	A	B	C	a	b	c
SUZ-AA09NLHZ						
SUZ-AA12NLHZ	12-19/32 (320)	6-57/64 (175)	14-61/64 (380)	33-1/16 (840)	13 (330)	34-10/16 (880)
SUZ-AA15NLHZ						
SUZ-AA18NLHZ						

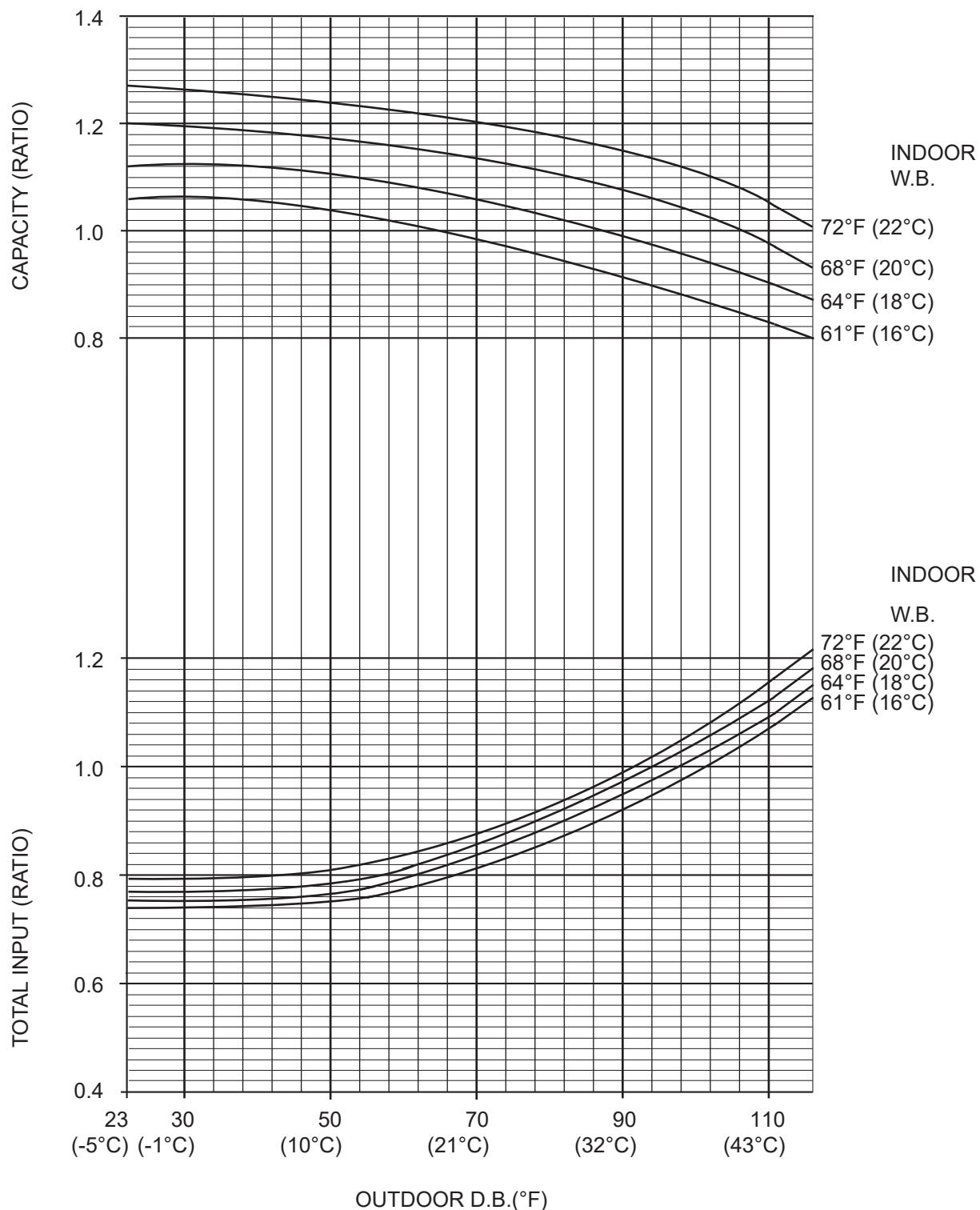
T3

NOISE CRITERION CURVES

SUZ-AA09/12NLHZ**SUZ-AA15/18NLHZ**

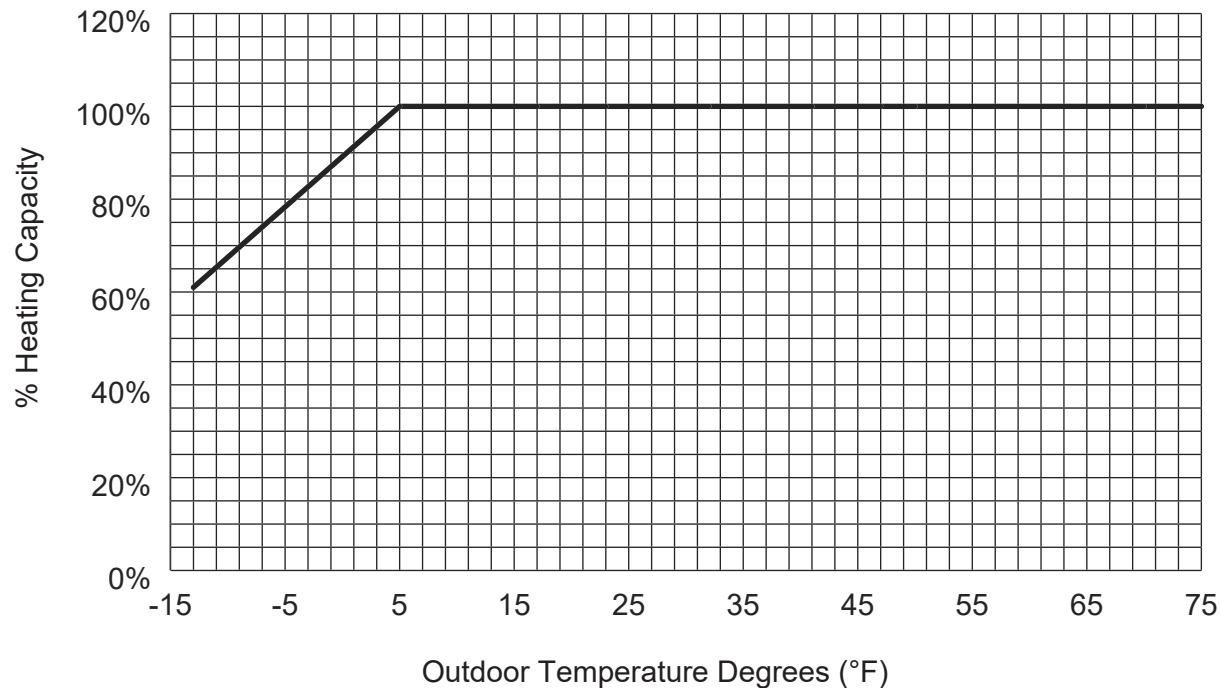
T4-1. PERFORMANCE CURVE

Cooling performance curve



Note : This diagram shows the case where the operation frequency of a compressor is fixed.

T4-2. MAX. HEATING CAPACITY IN LOW AMBIENT TEMPERATURE



Outdoor Temperature Degrees (°F)	-13	-4	5	17	23	32	41	47	50	70	75
% Heating Capacity	61%	80%	100%	100%	100%	100%	100%	100%	100%	100%	100%

T5-1. INVERTER TYPE**T5-1.1 Cooling capacity corrections**

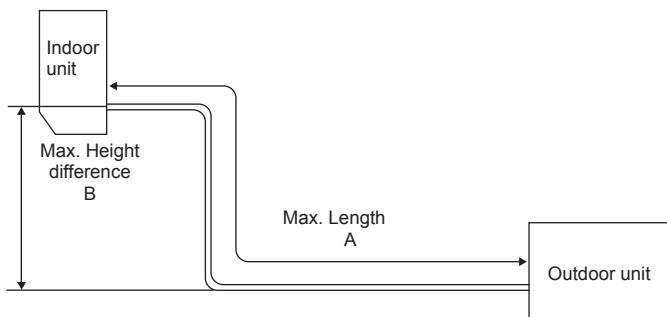
Model	Refrigerant piping length (one way: ft (m))			
	25 (7.6) (std.)	40 (12.2)	65 (19.8)	100 (30.5)
SUZ-AA09/12/15/18NLHZ	1.0	0.985	0.963	0.933

T5-1.2 Heating capacity corrections

Model	Refrigerant piping length (one way: ft (m))			
	25 (7.6) (std.)	40 (12.2)	65 (19.8)	100 (30.5)
SUZ-AA09/12/15/18NLHZ	1.0	0.997	0.993	0.987

T5-1.3 Max. refrigerant piping length & max. Height difference

Model	Refrigerant piping: ft. (m)		Piping size O.D: in. (mm)	
	Max. Length A	Max. Height difference B	Gas	Liquid
SUZ-AA09/12NLHZ	100 (30.5)	50 (15.2)	3/8 (9.52)	1/4 (6.35)
SUZ-AA15/18NLHZ		50 (15.2)	1/2 (12.7)	1/4 (6.35)

**T5-1.4 Additional refrigerant charge (R454B: oz.)**

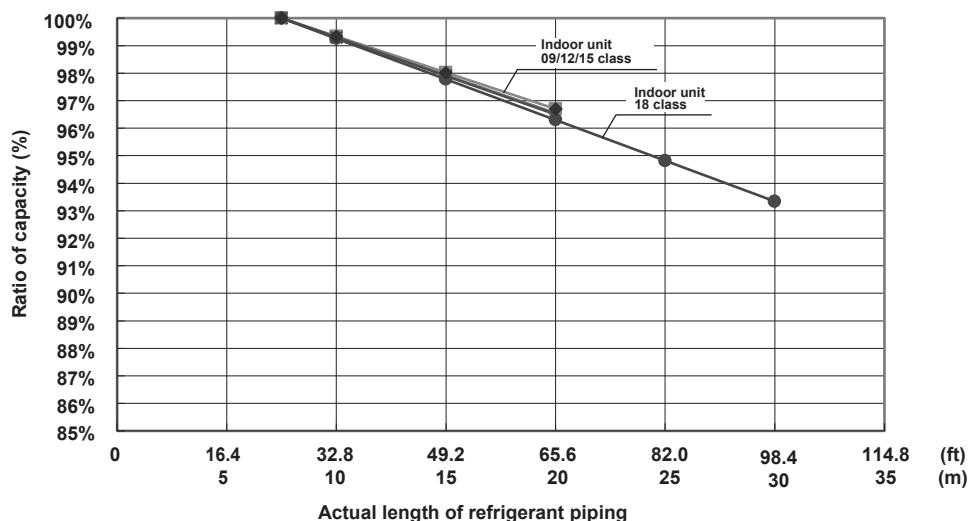
NOTE: Refrigerant piping exceeding 25 ft. requires additional refrigerant charge according to the calculation.

Model	Outdoor unit precharged	Refrigerant piping length (one way): ft. (m)								
		25 (7.6)	30 (9.1)	40 (12.2)	50 (15.2)	60 (18.3)	70 (21.3)	80(24.4)	90 (27.4)	100 (30.5)
SUZ-AA09/12/15/18NLHZ	2 lb. 16 oz. (1.35 kg)	0	1.08 (30 g)	3.24 (90 g)	5.40 (150 g)	7.56 (210 g)	9.72 (270 g)	11.88 (330 g)	14.04 (390 g)	16.20 (450 g)

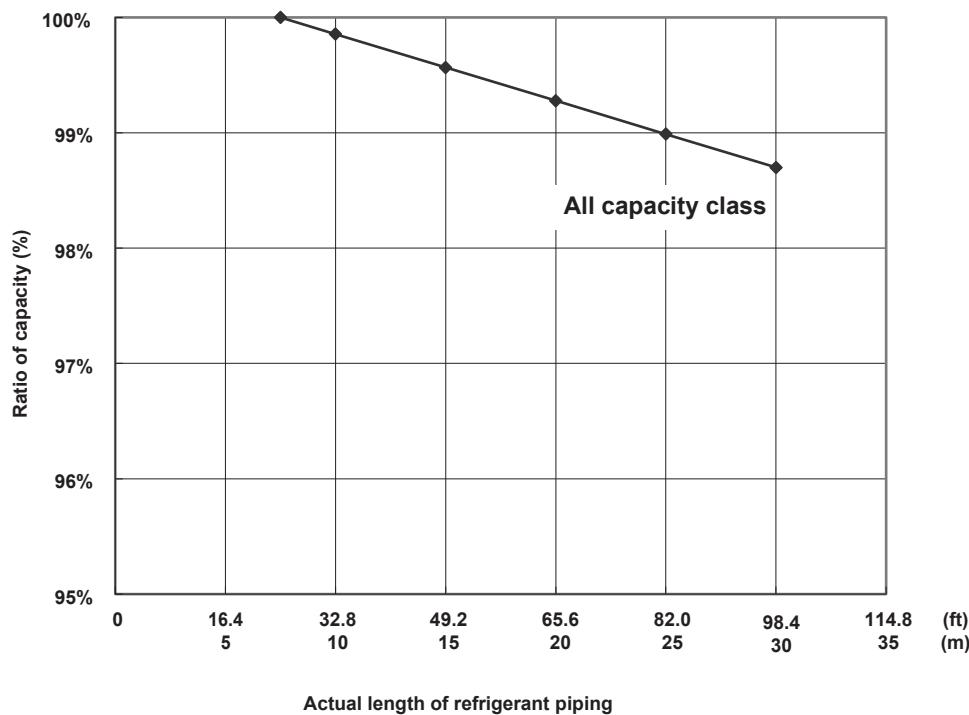
Calculation: X oz. = 1.08/5 oz./ft. × (Refrigerant piping length (ft.) - 25)

T6-1. CAPACITY CORRECTION RATIO CURVE FOR PIPING LENGTH

Correction ratio of capacity according to the length of piping (cooling)



Correction ratio of capacity according to the length of piping (heating)



The length intended for the capacity calculation, which counts the length of refrigerant piping and the number of bends, is called actual length.

$$\text{Length of refrigerant piping (ft)} + (\text{Number of bends} \times 0.984 \text{ ft}) = \text{Actual length of refrigerant piping (ft)}$$

$$[\text{Length of refrigerant piping (m)} + (\text{Number of bends} \times 0.3 \text{ m})] = \text{Actual length of refrigerant piping (m)}$$

**SLZ-AF09NL
SUZ-AA09NLHZ**
1) COOLING

RatedQ(Btu/h): 9,000
W: 720

Indoor W.B.			71°F / 21.7°C						67°F / 19.4°C						63°F / 17.2°C					
Outdoor D.B.			Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min
(°F)	(°C)	Q(Btu/h)	8,216	8,216	6,162	-	-	4,747	7,693	7,693	5,770	-	-	4,445	7,021	7,021	5,266	-	-	4,056
		W	809	809	607	-	-	427	789	789	592	-	-	416	756	756	567	-	-	399
115	46.1	Q(Btu/h)	8,589	8,589	6,442	-	-	4,963	7,992	7,992	5,994	-	-	4,617	7,320	7,320	5,490	-	-	4,229
		W	796	796	597	-	-	420	776	776	582	-	-	409	740	740	555	-	-	390
110	43.3	Q(Btu/h)	8,963	8,963	6,722	-	-	5,178	8,290	8,290	6,218	-	-	4,790	7,693	7,693	5,770	-	-	4,445
		W	786	786	589	-	-	415	756	756	567	-	-	399	723	723	542	-	-	382
105	40.6	Q(Btu/h)	9,261	9,261	6,946	-	-	5,351	8,664	8,664	6,498	-	-	5,006	7,992	7,992	5,994	-	-	4,617
		W	763	763	572	-	-	403	740	740	555	-	-	390	707	707	530	-	-	373
95	35.0	Q(Btu/h)	9,635	9,635	7,226	-	-	5,567	9,000	9,000	6,750	-	-	5,200	8,365	8,365	6,274	-	-	4,833
		W	750	750	562	-	-	396	720	720	540	-	-	380	690	690	518	-	-	364
90	32.2	Q(Btu/h)	9,934	9,934	7,450	-	-	5,739	9,336	9,336	7,002	-	-	5,394	8,664	8,664	6,498	-	-	5,006
		W	723	723	542	-	-	382	690	690	518	-	-	364	664	664	498	-	-	351
85	29.4	Q(Btu/h)	10,307	10,307	7,730	-	-	5,955	9,710	9,710	7,282	-	-	5,610	9,037	9,037	6,778	-	-	5,222
		W	697	697	523	-	-	368	664	664	498	-	-	351	641	641	481	-	-	338
80	26.7	Q(Btu/h)	10,606	10,606	7,954	-	-	6,128	10,008	10,008	7,506	-	-	5,783	9,411	9,411	7,058	-	-	5,437
		W	671	671	503	-	-	354	635	635	476	-	-	335	615	615	461	-	-	324
75	23.9	Q(Btu/h)	10,979	10,979	8,234	-	-	6,344	10,307	10,307	7,730	-	-	5,955	9,747	9,747	7,310	-	-	5,632
		W	641	641	481	-	-	338	605	605	454	-	-	319	591	591	443	-	-	312
70	21.1	Q(Btu/h)	11,241	11,241	8,430	-	-	6,495	10,531	10,531	7,898	-	-	6,085	10,083	10,083	7,562	-	-	5,826
		W	608	608	456	-	-	321	579	579	434	-	-	305	556	556	417	-	-	293
67	19.4	Q(Btu/h)	11,353	11,353	8,515	-	-	6,559	10,755	10,755	8,066	-	-	6,214	10,307	10,307	7,730	-	-	5,955
		W	579	579	434	-	-	305	556	556	417	-	-	293	526	526	395	-	-	278

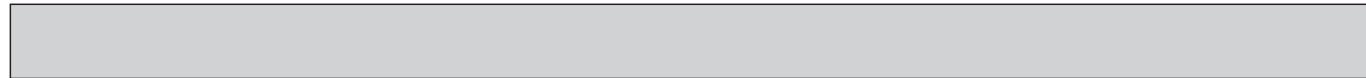
* It may not reach the above capacities in low ambient temperatures.

**SLZ-AF09NL
SUZ-AA09NLHZ**
2) HEATING

Rated
Q(Btu/h): 12,000
W: 1,020

Indoor D.B. Outdoor W.B. (°F) (°C)			77°F / 25.0°C						68°F / 20.0°C						59°F / 15.0°C						
			Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	
65	18.3	Q(Btu/h)	17,666	11,513	8,635	-	-	9,181	18,250	12,000	9,000	-	-	9,570	18,834	12,075	9,057	-	-	9,630	
			W	1,173	1,192	894	-	-	525	1,148	1,155	866	-	-	509	1,124	1,081	811	-	-	476
60	15.6	Q(Btu/h)	16,936	11,510	8,632	-	-	8,628	17,520	12,000	9,000	-	-	8,996	18,104	12,294	9,221	-	-	9,216	
			W	1,171	1,158	869	-	-	530	1,146	1,119	840	-	-	512	1,120	1,053	790	-	-	482
55	12.8	Q(Btu/h)	16,206	11,498	8,624	-	-	8,070	16,790	12,000	9,000	-	-	8,422	17,374	12,551	9,413	-	-	8,808	
			W	1,185	1,124	843	-	-	533	1,159	1,083	812	-	-	514	1,133	1,029	772	-	-	488
50	10.0	Q(Btu/h)	15,476	11,477	8,608	-	-	7,506	15,987	12,000	9,000	-	-	7,848	16,571	12,796	9,597	-	-	8,368	
			W	1,215	1,088	816	-	-	535	1,188	1,045	784	-	-	514	1,160	1,009	756	-	-	496
45	7.2	Q(Btu/h)	11,820	11,278	8,459	-	-	6,937	12,300	11,826	8,869	-	-	7,274	12,780	12,894	9,671	-	-	7,931	
			W	1,261	1,051	788	-	-	535	1,232	1,007	755	-	-	512	1,204	987	740	-	-	502
40	4.4	Q(Btu/h)	11,520	10,819	8,114	-	-	6,364	12,000	11,390	8,542	-	-	6,700	12,480	12,975	9,732	-	-	7,633	
			W	1,324	1,013	760	-	-	533	1,293	968	726	-	-	509	1,262	975	731	-	-	513
35	1.7	Q(Btu/h)	11,520	10,348	7,761	-	-	5,787	12,000	10,954	8,215	-	-	6,126	12,480	12,737	9,553	-	-	7,123	
			W	1,436	974	731	-	-	529	1,369	928	696	-	-	504	1,281	957	718	-	-	520
30	-1.1	Q(Btu/h)	11,520	9,744	7,308	-	-	5,207	12,000	10,389	7,792	-	-	5,552	12,480	12,055	9,042	-	-	6,442	
			W	1,521	935	701	-	-	524	1,462	887	665	-	-	497	1,382	919	690	-	-	515
25	-3.9	Q(Btu/h)	11,520	8,948	6,711	-	-	4,624	12,000	9,631	7,224	-	-	4,978	12,480	11,725	8,794	-	-	6,060	
			W	1,629	894	670	-	-	517	1,570	845	634	-	-	489	1,491	906	680	-	-	524
20	-6.7	Q(Btu/h)	11,520	8,142	6,106	4,071	-	4,040	12,000	8,874	6,655	4,437	-	4,404	12,480	11,085	8,314	5,542	-	5,501	
			W	1,754	852	639	426	-	508	1,694	803	602	401	-	479	1,614	869	651	434	-	518
15	-9.4	Q(Btu/h)	11,520	7,324	5,493	3,662	-	3,456	12,000	8,116	6,087	4,058	-	3,829	12,480	10,383	7,787	5,192	-	4,899	
			W	1,776	810	608	405	-	498	1,717	759	569	380	-	467	1,640	836	627	418	-	514
10	-12.2	Q(Btu/h)	11,520	6,495	4,871	3,248	-	2,873	12,000	7,359	5,519	3,679	-	3,255	12,480	9,683	7,262	4,842	-	4,284	
			W	1,798	767	576	384	-	487	1,741	715	536	357	-	453	1,664	794	596	397	-	504
5	-15.0	Q(Btu/h)	11,520	5,652	4,239	2,826	-	2,296	12,000	6,601	4,951	3,301	-	2,681	12,480	8,774	6,580	4,387	-	3,564	
			W	1,822	724	543	362	-	474	1,765	669	502	335	-	438	1,689	747	560	373	-	489
0	-17.8	Q(Btu/h)	9,585	4,791	3,593	2,395	-	1,728	10,686	5,844	4,383	2,922	-	2,107	10,322	7,270	5,452	3,635	-	2,622	
			W	1,640	681	511	341	-	460	1,572	623	467	312	-	421	1,503	669	502	334	-	452
-4	-20.0	Q(Btu/h)	8,142	4,086	3,065	2,043	-	1,286	9,634	5,238	3,928	2,619	-	1,648	8,769	7,523	5,642	3,761	-	2,367	
			W	1,563	647	485	324	-	449	1,489	586	439	293	-	406	1,414	628	471	314	-	436
-13	-25.0	Q(Btu/h)	4,897	2,525	1,894	1,263	631	273	7,268	3,874	2,906	1,937	969	-	615	5,274	5,914	4,436	2,957	1,479	1,048
			W	1,488	573	429	286	143	369	1,384	499	374	250	125	369	1,280	610	458	305	153	445

* Above data is for heating operation without any frost.



**SLZ-AF12NL
SUZ-AA12NLHZ**
1) COOLING

Rated
Q(Btu/h): 12,000
W: 860

Indoor W.B.			71°F / 21.7°C						67°F / 19.4°C						63°F / 17.2°C					
Outdoor D.B. (°F)	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min		
115	46.1	Q(Btu/h)	10,954	10,954	8,216	5,477	-	4,747	10,257	10,257	7,693	5,129	-	4,445	9,361	9,361	7,021	4,680	-	4,056
		W	966	966	725	483	-	427	942	942	707	471	-	416	903	903	677	452	-	399
110	43.3	Q(Btu/h)	11,452	11,452	8,589	5,726	-	4,963	10,656	10,656	7,992	5,328	-	4,617	9,759	9,759	7,320	4,880	-	4,229
		W	950	950	713	475	-	420	927	927	695	463	-	409	884	884	663	442	-	390
105	40.6	Q(Btu/h)	11,950	11,950	8,963	5,975	-	5,178	11,054	11,054	8,290	5,527	-	4,790	10,257	10,257	7,693	5,129	-	4,445
		W	939	939	704	469	-	415	903	903	677	452	-	399	864	864	648	432	-	382
100	37.8	Q(Btu/h)	12,349	12,349	9,261	6,174	-	5,351	11,552	11,552	8,664	5,776	-	5,006	10,656	10,656	7,992	5,328	-	4,617
		W	911	911	683	456	-	403	884	884	663	442	-	390	844	844	633	422	-	373
95	35.0	Q(Btu/h)	12,846	12,846	9,635	6,423	-	5,567	12,000	12,000	9,000	6,000	-	5,200	11,154	11,154	8,365	5,577	-	4,833
		W	895	895	672	448	-	396	860	860	645	430	-	380	825	825	618	412	-	364
90	32.2	Q(Btu/h)	13,245	13,245	9,934	6,622	-	5,739	12,448	12,448	9,336	6,224	-	5,394	11,552	11,552	8,664	5,776	-	5,006
		W	864	864	648	432	-	382	825	825	618	412	-	364	793	793	595	397	-	351
85	29.4	Q(Btu/h)	13,743	13,743	10,307	6,871	-	5,955	12,946	12,946	9,710	6,473	-	5,610	12,050	12,050	9,037	6,025	-	5,222
		W	833	833	624	416	-	368	793	793	595	397	-	351	766	766	574	383	-	338
80	26.7	Q(Btu/h)	14,141	14,141	10,606	7,071	-	6,128	13,344	13,344	10,008	6,672	-	5,783	12,548	12,548	9,411	6,274	-	5,437
		W	801	801	601	401	-	354	758	758	568	379	-	335	734	734	551	367	-	324
75	23.9	Q(Btu/h)	14,639	14,639	10,979	7,320	-	6,344	13,743	13,743	10,307	6,871	-	5,955	12,996	12,996	9,747	6,498	-	5,632
		W	766	766	574	383	-	338	723	723	542	361	-	319	706	706	530	353	-	312
70	21.1	Q(Btu/h)	14,988	14,988	11,241	7,494	-	6,495	14,041	14,041	10,531	7,021	-	6,085	13,444	13,444	10,083	6,722	-	5,826
		W	726	726	545	363	-	321	691	691	518	346	-	305	664	664	498	332	-	293
67	19.4	Q(Btu/h)	15,137	15,137	11,353	7,568	-	6,559	14,340	14,340	10,755	7,170	-	6,214	13,743	13,743	10,307	6,871	-	5,955
		W	691	691	518	346	-	305	664	664	498	332	-	293	628	628	471	314	-	278

* It may not reach the above capacities in low ambient temperatures.

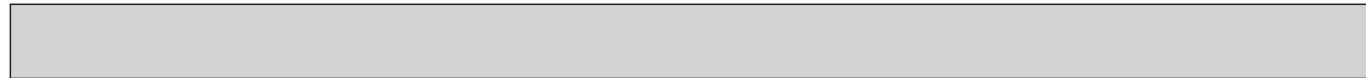
**SLZ-AF12NL
SUZ-AA12NLHZ
2) HEATING**

Rated

Q(Btu/h): 15,000
W: 1,290

Indoor D.B. Outdoor W.B. (°F) (°C)			77°F / 25.0°C						68°F / 20.0°C						59°F / 15.0°C					
			Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min
65	18.3	Q(Btu/h)	20,449	14,391	10,793	-	-	9,181	21,125	15,000	11,250	-	-	9,570	21,801	15,094	11,321	-	-	9,630
			W	1,373	1,507	1,130	-	-	525	1,344	1,461	1,096	-	-	509	1,315	1,368	1,026	-	-
60	15.6	Q(Btu/h)	19,604	14,387	10,791	-	-	8,628	20,280	15,000	11,250	-	-	8,996	20,956	15,368	11,526	-	-	9,216
			W	1,370	1,465	1,099	-	-	530	1,341	1,416	1,062	-	-	512	1,312	1,332	999	-	-
55	12.8	Q(Btu/h)	18,759	14,373	10,780	-	-	8,070	19,435	15,000	11,250	-	-	8,422	20,111	15,688	11,766	-	-	8,808
			W	1,387	1,421	1,066	-	-	533	1,356	1,369	1,027	-	-	514	1,326	1,301	976	-	-
50	10.0	Q(Btu/h)	17,914	14,347	10,760	-	-	7,506	18,506	15,000	11,250	-	-	7,848	19,182	15,995	11,996	-	-	8,368
			W	1,422	1,376	1,032	-	-	535	1,390	1,322	992	-	-	514	1,358	1,276	957	-	-
45	7.2	Q(Btu/h)	14,775	14,098	10,574	7,049	-	6,937	15,375	14,782	11,086	7,391	-	7,274	15,975	16,118	12,088	8,059	-	7,931
			W	1,476	1,329	997	665	-	535	1,442	1,274	955	637	-	512	1,409	1,249	936	624	-
40	4.4	Q(Btu/h)	14,400	13,524	10,143	6,762	-	6,364	15,000	14,237	10,678	7,118	-	6,700	15,600	16,219	12,165	8,110	-	7,633
			W	1,550	1,281	961	641	-	533	1,513	1,224	918	612	-	509	1,477	1,233	925	617	-
35	1.7	Q(Btu/h)	14,400	12,935	9,702	6,468	-	5,787	15,000	13,692	10,269	6,846	-	6,126	15,600	15,922	11,941	7,961	-	7,123
			W	1,680	1,232	924	616	-	529	1,603	1,174	880	587	-	504	1,499	1,211	908	605	-
30	-1.1	Q(Btu/h)	14,400	12,180	9,135	6,090	-	5,207	15,000	12,986	9,740	6,493	-	5,552	15,600	15,069	11,302	7,535	-	6,442
			W	1,781	1,182	886	591	-	524	1,711	1,122	841	561	-	497	1,618	1,163	872	581	-
25	-3.9	Q(Btu/h)	14,400	11,185	8,389	5,592	-	4,624	15,000	12,039	9,029	6,020	-	4,978	15,600	14,656	10,992	7,328	-	6,060
			W	1,906	1,130	848	565	-	517	1,838	1,069	802	535	-	489	1,746	1,146	860	573	-
20	-6.7	Q(Btu/h)	14,400	10,177	7,633	5,088	-	4,040	15,000	11,092	8,319	5,546	-	4,404	15,600	13,856	10,392	6,928	-	5,501
			W	2,053	1,078	809	539	-	508	1,983	1,015	761	508	-	479	1,889	1,099	824	549	-
15	-9.4	Q(Btu/h)	14,400	9,155	6,867	4,578	-	3,456	15,000	10,145	7,609	5,073	-	3,829	15,600	12,979	9,734	6,489	-	4,899
			W	2,219	1,025	768	512	-	498	2,146	960	720	480	-	467	2,049	1,058	793	529	-
10	-12.2	Q(Btu/h)	14,400	8,119	6,089	4,059	-	2,873	15,000	9,199	6,899	4,599	-	3,255	15,600	12,104	9,078	6,052	-	4,284
			W	2,304	971	728	485	-	487	2,231	904	678	452	-	453	2,133	1,004	753	502	-
5	-15.0	Q(Btu/h)	14,400	7,064	5,298	3,532	-	2,296	15,000	8,252	6,189	4,126	-	2,681	15,600	10,967	8,225	5,484	-	3,564
			W	2,390	916	687	458	-	474	2,315	847	635	423	-	438	2,216	945	708	472	-
0	-17.8	Q(Btu/h)	11,095	5,989	4,491	2,994	-	1,728	13,357	7,305	5,479	3,652	-	2,107	11,948	9,087	6,815	4,544	-	2,622
			W	2,152	861	646	431	-	460	2,062	788	591	394	-	421	1,972	846	634	423	-
-4	-20.0	Q(Btu/h)	9,425	5,108	3,831	2,554	-	1,286	12,043	6,547	4,910	3,274	-	1,648	10,150	9,404	7,053	4,702	-	2,367
			W	2,050	819	614	409	-	449	1,953	741	556	370	-	406	1,856	795	596	397	-
-13	-25.0	Q(Btu/h)	5,668	3,156	2,367	1,578	789	273	9,085	4,843	3,632	2,421	1,211	615	6,104	7,393	5,545	3,696	1,848	1,048
			W	1,952	724	543	362	181	369	1,816	631	474	316	158	369	1,680	772	579	386	193

* Above data is for heating operation without any frost.



**SLZ-AF15NL
SUZ-AA15NLHZ**
1) COOLING

Rated
Q(Btu/h): 15,000
W: 1,180

Indoor W.B.			71°F / 21.7°C						67°F / 19.4°C						63°F / 17.2°C					
Outdoor D.B. (°F)	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min		
115	46.1	Q(Btu/h)	13,693	13,693	10,270	6,846	-	4,838	12,822	12,822	9,616	6,411	-	4,530	11,701	11,701	8,776	5,851	-	4,134
		W	1,325	1,325	994	663	-	427	1,293	1,293	970	647	-	416	1,239	1,239	929	620	-	399
110	43.3	Q(Btu/h)	14,315	14,315	10,737	7,158	-	5,058	13,320	13,320	9,990	6,660	-	4,706	12,199	12,199	9,149	6,100	-	4,310
		W	1,304	1,304	978	652	-	420	1,272	1,272	954	636	-	409	1,212	1,212	909	606	-	390
105	40.6	Q(Btu/h)	14,938	14,938	11,203	7,469	-	5,278	13,817	13,817	10,363	6,909	-	4,882	12,822	12,822	9,616	6,411	-	4,530
		W	1,288	1,288	966	644	-	415	1,239	1,239	929	620	-	399	1,185	1,185	889	593	-	382
100	37.8	Q(Btu/h)	15,436	15,436	11,577	7,718	-	5,454	14,440	14,440	10,830	7,220	-	5,102	13,320	13,320	9,990	6,660	-	4,706
		W	1,250	1,250	938	625	-	403	1,212	1,212	909	606	-	390	1,158	1,158	869	579	-	373
95	35.0	Q(Btu/h)	16,058	16,058	12,044	8,029	-	5,674	15,000	15,000	11,250	7,500	-	5,300	13,942	13,942	10,456	6,971	-	4,926
		W	1,228	1,228	921	614	-	396	1,180	1,180	885	590	-	380	1,132	1,132	849	566	-	364
90	32.2	Q(Btu/h)	16,556	16,556	12,417	8,278	-	5,850	15,560	15,560	11,670	7,780	-	5,498	14,440	14,440	10,830	7,220	-	5,102
		W	1,185	1,185	889	593	-	382	1,132	1,132	849	566	-	364	1,088	1,088	816	544	-	351
85	29.4	Q(Btu/h)	17,178	17,178	12,884	8,589	-	6,070	16,183	16,183	12,137	8,091	-	5,718	15,062	15,062	11,297	7,531	-	5,322
		W	1,142	1,142	857	571	-	368	1,088	1,088	816	544	-	351	1,051	1,051	788	525	-	338
80	26.7	Q(Btu/h)	17,676	17,676	13,257	8,838	-	6,246	16,680	16,680	12,510	8,340	-	5,894	15,685	15,685	11,763	7,842	-	5,542
		W	1,099	1,099	824	550	-	354	1,040	1,040	780	520	-	335	1,008	1,008	756	504	-	324
75	23.9	Q(Btu/h)	18,299	18,299	13,724	9,149	-	6,466	17,178	17,178	12,884	8,589	-	6,070	16,245	16,245	12,184	8,122	-	5,740
		W	1,051	1,051	788	525	-	338	991	991	744	496	-	319	969	969	727	484	-	312
70	21.1	Q(Btu/h)	18,734	18,734	14,051	9,367	-	6,620	17,552	17,552	13,164	8,776	-	6,202	16,805	16,805	12,604	8,402	-	5,938
		W	997	997	748	498	-	321	948	948	711	474	-	305	911	911	683	455	-	293
67	19.4	Q(Btu/h)	18,921	18,921	14,191	9,461	-	6,685	17,925	17,925	13,444	8,963	-	6,334	17,178	17,178	12,884	8,589	-	6,070
		W	948	948	711	474	-	305	911	911	683	455	-	293	862	862	647	431	-	278

* It may not reach the above capacities in low ambient temperatures.

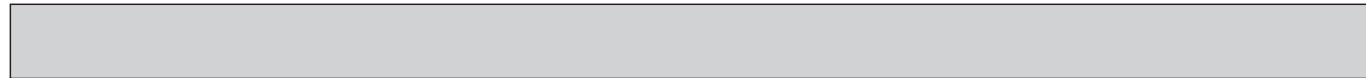
**SLZ-AF15NL
SUZ-AA15NLHZ
2) HEATING**

Rated

Q(Btu/h): 17,000
W: 1,500

Indoor D.B. Outdoor W.B. (°F) (°C)			77°F / 25.0°C						68°F / 20.0°C						59°F / 15.0°C					
			Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min
65	18.3	Q(Btu/h)	22,990	16,310	12,232	-	-	9,301	23,750	17,000	12,750	-	-	9,694	24,510	17,107	12,830	-	-	9,755
			W	1,628	1,753	1,314	-	-	514	1,594	1,699	1,274	-	-	499	1,559	1,590	1,193	-	-
60	15.6	Q(Btu/h)	22,040	16,306	12,229	-	-	8,740	22,800	17,000	12,750	-	-	9,113	23,560	17,417	13,063	-	-	9,336
			W	1,625	1,703	1,277	-	-	519	1,590	1,646	1,235	-	-	502	1,555	1,549	1,161	-	-
55	12.8	Q(Btu/h)	21,090	16,290	12,217	-	-	8,175	21,850	17,000	12,750	-	-	8,531	22,610	17,780	13,335	-	-	8,923
			W	1,644	1,652	1,239	-	-	523	1,608	1,592	1,194	-	-	504	1,572	1,513	1,135	-	-
50	10.0	Q(Btu/h)	20,140	16,260	12,195	8,130	-	7,603	20,805	17,000	12,750	8,500	-	7,950	21,565	18,128	13,596	9,064	-	8,477
			W	1,686	1,600	1,200	800	-	524	1,648	1,537	1,153	769	-	504	1,610	1,483	1,112	742	-
45	7.2	Q(Btu/h)	16,745	15,978	11,983	7,989	-	7,027	17,425	16,753	12,565	8,376	-	7,368	18,105	18,267	13,700	9,133	-	8,034
			W	1,750	1,546	1,159	773	-	524	1,710	1,481	1,111	741	-	502	1,670	1,452	1,089	726	-
40	4.4	Q(Btu/h)	16,320	15,327	11,495	7,664	-	6,447	17,000	16,135	12,101	8,068	-	6,787	17,680	18,382	13,786	9,191	-	7,732
			W	1,837	1,490	1,117	745	-	522	1,794	1,424	1,068	712	-	499	1,751	1,434	1,075	717	-
35	1.7	Q(Btu/h)	16,320	14,660	10,995	7,330	-	5,862	17,000	15,518	11,638	7,759	-	6,205	17,680	18,044	13,533	9,022	-	7,216
			W	1,992	1,433	1,075	716	-	519	1,900	1,365	1,024	682	-	494	1,778	1,408	1,056	704	-
30	-1.1	Q(Btu/h)	16,320	13,804	10,353	6,902	-	5,275	17,000	14,718	11,038	7,359	-	5,624	17,680	17,079	12,809	8,539	-	6,526
			W	2,111	1,374	1,031	687	-	514	2,028	1,305	978	652	-	487	1,918	1,352	1,014	676	-
25	-3.9	Q(Btu/h)	16,320	12,676	9,507	6,338	-	4,684	17,000	13,645	10,233	6,822	-	5,042	17,680	16,610	12,458	8,305	-	6,138
			W	2,260	1,315	986	657	-	507	2,178	1,243	932	622	-	479	2,069	1,333	1,000	667	-
20	-6.7	Q(Btu/h)	16,320	11,534	8,650	5,767	-	4,093	17,000	12,571	9,429	6,286	-	4,461	17,680	15,703	11,778	7,852	-	5,572
			W	2,434	1,253	940	627	-	498	2,350	1,180	885	590	-	469	2,239	1,277	958	639	-
15	-9.4	Q(Btu/h)	16,320	10,376	7,782	5,188	-	3,501	17,000	11,498	8,624	5,749	-	3,879	17,680	14,709	11,032	7,355	-	4,963
			W	2,631	1,191	894	596	-	488	2,544	1,116	837	558	-	458	2,429	1,230	922	615	-
10	-12.2	Q(Btu/h)	16,320	9,201	6,901	4,601	-	2,911	17,000	10,425	7,819	5,213	-	3,298	17,680	13,718	10,288	6,859	-	4,339
			W	2,851	1,129	846	564	-	477	2,760	1,051	788	526	-	444	2,639	1,168	876	584	-
5	-15.0	Q(Btu/h)	16,320	8,006	6,005	4,003	-	2,325	17,000	9,352	7,014	4,676	-	2,716	17,680	12,429	9,322	6,215	-	3,610
			W	2,927	1,065	799	533	-	465	2,836	984	738	492	-	429	2,714	1,098	824	549	-
0	-17.8	Q(Btu/h)	12,474	6,787	5,090	3,394	-	1,750	15,138	8,279	6,209	4,139	-	2,135	13,433	10,299	7,724	5,149	-	2,656
			W	2,636	1,002	751	501	-	451	2,526	917	687	458	-	413	2,415	984	738	492	-
-4	-20.0	Q(Btu/h)	10,596	5,789	4,342	2,894	1,447	1,303	13,648	7,420	5,565	3,710	1,855	1,670	11,411	10,658	7,993	5,329	2,664	2,398
			W	2,511	952	714	476	238	440	2,392	861	646	431	215	398	2,273	924	693	462	231
-13	-25.0	Q(Btu/h)	6,373	3,577	2,683	1,789	894	277	10,296	5,488	4,116	2,744	1,372	623	6,863	8,378	6,284	4,189	2,095	1,062
			W	2,391	842	631	421	210	362	2,224	734	551	367	184	362	2,058	897	673	449	224

* Above data is for heating operation without any frost.



**SLZ-AF18NL
SUZ-AA18NLHZ**
1) COOLING

Rated
Q(Btu/h): 18,000
W: 1,500

Indoor W.B.			71°F / 21.7°C						67°F / 19.4°C						63°F / 17.2°C					
Outdoor D.B. (°F)	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min		
115	46.1	Q(Btu/h)	16,432	16,432	12,324	8,216	-	4,838	15,386	15,386	11,539	7,693	-	4,530	14,041	14,041	10,531	7,021	-	4,134
			W	1,685	1,685	1,264	842	-	427	1,644	1,644	1,233	822	-	416	1,575	1,575	1,182	788	-
110	43.3	Q(Btu/h)	17,178	17,178	12,884	8,589	-	5,058	15,983	15,983	11,988	7,992	-	4,706	14,639	14,639	10,979	7,320	-	4,310
			W	1,658	1,658	1,243	829	-	420	1,616	1,616	1,212	808	-	409	1,541	1,541	1,156	771	-
105	40.6	Q(Btu/h)	17,925	17,925	13,444	8,963	-	5,278	16,581	16,581	12,436	8,290	-	4,882	15,386	15,386	11,539	7,693	-	4,530
			W	1,637	1,637	1,228	818	-	415	1,575	1,575	1,182	788	-	399	1,507	1,507	1,130	753	-
100	37.8	Q(Btu/h)	18,523	18,523	13,892	9,261	-	5,454	17,328	17,328	12,996	8,664	-	5,102	15,983	15,983	11,988	7,992	-	4,706
			W	1,589	1,589	1,192	795	-	403	1,541	1,541	1,156	771	-	390	1,473	1,473	1,104	736	-
95	35.0	Q(Btu/h)	19,270	19,270	14,452	9,635	-	5,674	18,000	18,000	13,500	9,000	-	5,300	16,730	16,730	12,548	8,365	-	4,926
			W	1,562	1,562	1,171	781	-	396	1,500	1,500	1,125	750	-	380	1,438	1,438	1,079	719	-
90	32.2	Q(Btu/h)	19,867	19,867	14,900	9,934	-	5,850	18,672	18,672	14,004	9,336	-	5,498	17,328	17,328	12,996	8,664	-	5,102
			W	1,507	1,507	1,130	753	-	382	1,438	1,438	1,079	719	-	364	1,384	1,384	1,038	692	-
85	29.4	Q(Btu/h)	20,614	20,614	15,461	10,307	-	6,070	19,419	19,419	14,564	9,710	-	5,718	18,075	18,075	13,556	9,037	-	5,322
			W	1,452	1,452	1,089	726	-	368	1,384	1,384	1,038	692	-	351	1,336	1,336	1,002	668	-
80	26.7	Q(Btu/h)	21,212	21,212	15,909	10,606	-	6,246	20,017	20,017	15,012	10,008	-	5,894	18,822	18,822	14,116	9,411	-	5,542
			W	1,397	1,397	1,048	699	-	354	1,322	1,322	991	661	-	335	1,281	1,281	961	640	-
75	23.9	Q(Btu/h)	21,959	21,959	16,469	10,979	-	6,466	20,614	20,614	15,461	10,307	-	6,070	19,494	19,494	14,620	9,747	-	5,740
			W	1,336	1,336	1,002	668	-	338	1,260	1,260	945	630	-	319	1,232	1,232	924	616	-
70	21.1	Q(Btu/h)	22,481	22,481	16,861	11,241	-	6,620	21,062	21,062	15,797	10,531	-	6,202	20,166	20,166	15,124	10,083	-	5,938
			W	1,267	1,267	950	634	-	321	1,205	1,205	904	603	-	305	1,158	1,158	868	579	-
67	19.4	Q(Btu/h)	22,705	22,705	17,029	11,353	-	6,685	21,510	21,510	16,133	10,755	-	6,334	20,614	20,614	15,461	10,307	-	6,070
			W	1,205	1,205	904	603	-	305	1,158	1,158	868	579	-	293	1,096	1,096	822	548	-

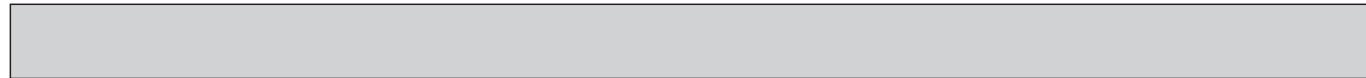
* It may not reach the above capacities in low ambient temperatures.

**SLZ-AF18NL
SUZ-AA18NLHZ
2) HEATING**

Rated
Q(Btu/h): 20,000
W: 1,880

Indoor D.B. Outdoor W.B. (°F) (°C)			77°F / 25.0°C						68°F / 20.0°C						59°F / 15.0°C						
			Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	
65	18.3	Q(Btu/h)	26,378	19,188	14,391	9,594	-	9,420	27,250	20,000	15,000	10,000	-	9,818	28,122	20,126	15,094	10,063	-	9,880	
			W	1,883	2,197	1,647	1,098	-	504	1,843	2,129	1,597	1,064	-	489	1,803	1,993	1,495	997	-	457
60	15.6	Q(Btu/h)	25,288	19,183	14,387	9,592	-	8,852	26,160	20,000	15,000	10,000	-	9,229	27,032	20,491	15,368	10,245	-	9,456	
			W	1,879	2,135	1,601	1,067	-	509	1,838	2,063	1,547	1,032	-	492	1,798	1,941	1,456	970	-	463
55	12.8	Q(Btu/h)	24,198	19,164	14,373	9,582	-	8,279	25,070	20,000	15,000	10,000	-	8,640	25,942	20,918	15,688	10,459	-	9,037	
			W	1,901	2,071	1,553	1,035	-	512	1,859	1,996	1,497	998	-	494	1,818	1,896	1,422	948	-	469
50	10.0	Q(Btu/h)	23,108	19,129	14,347	9,564	-	7,701	23,871	20,000	15,000	10,000	-	8,052	24,743	21,327	15,995	10,663	-	8,586	
			W	1,949	2,005	1,504	1,002	-	514	1,906	1,927	1,445	963	-	494	1,862	1,859	1,394	929	-	476
45	7.2	Q(Btu/h)	19,700	18,797	14,098	9,399	-	7,117	20,500	19,709	14,782	9,855	-	7,463	21,300	21,490	16,118	10,745	-	8,137	
			W	2,024	1,937	1,453	969	-	514	1,977	1,856	1,392	928	-	492	1,931	1,820	1,365	910	-	482
40	4.4	Q(Btu/h)	19,200	18,032	13,524	9,016	-	6,529	20,000	18,983	14,237	9,491	-	6,874	20,800	21,626	16,219	10,813	-	7,831	
			W	2,125	1,867	1,401	934	-	512	2,075	1,784	1,338	892	-	489	2,025	1,797	1,348	899	-	493
35	1.7	Q(Btu/h)	19,200	17,247	12,935	8,624	-	5,937	20,000	18,256	13,692	9,128	-	6,285	20,800	21,229	15,922	10,614	-	7,308	
			W	2,304	1,796	1,347	898	-	508	2,197	1,710	1,283	855	-	484	2,056	1,764	1,323	882	-	499
30	-1.1	Q(Btu/h)	19,200	16,240	12,180	8,120	-	5,342	20,000	17,315	12,986	8,657	-	5,696	20,800	20,092	15,069	10,046	-	6,609	
			W	2,441	1,722	1,292	861	-	503	2,345	1,635	1,226	818	-	478	2,218	1,695	1,271	847	-	495
25	-3.9	Q(Btu/h)	19,200	14,913	11,185	7,457	-	4,744	20,000	16,052	12,039	8,026	-	5,107	20,800	19,542	14,656	9,771	-	6,217	
			W	2,613	1,648	1,236	824	-	497	2,519	1,558	1,169	779	-	470	2,393	1,671	1,253	835	-	504
20	-6.7	Q(Btu/h)	19,200	13,569	10,177	6,785	-	4,145	20,000	14,790	11,092	7,395	-	4,518	20,800	18,475	13,856	9,237	-	5,644	
			W	2,815	1,571	1,178	786	-	488	2,718	1,479	1,110	740	-	460	2,589	1,601	1,201	801	-	498
15	-9.4	Q(Btu/h)	19,200	12,207	9,155	6,104	-	3,546	20,000	13,527	10,145	6,764	-	3,929	20,800	17,305	12,979	8,653	-	5,026	
			W	3,042	1,493	1,120	747	-	479	2,942	1,399	1,049	700	-	448	2,809	1,542	1,156	771	-	494
10	-12.2	Q(Btu/h)	19,200	10,825	8,119	5,413	-	2,948	20,000	12,265	9,199	6,132	-	3,340	20,800	16,138	12,104	8,069	-	4,395	
			W	3,298	1,414	1,061	707	-	468	3,192	1,317	988	659	-	435	3,052	1,464	1,098	732	-	484
5	-15.0	Q(Btu/h)	19,200	9,419	7,064	4,710	-	2,355	20,000	11,002	8,252	5,501	-	2,751	20,800	14,623	10,967	7,311	-	3,656	
			W	3,579	1,335	1,001	667	-	455	3,468	1,234	925	617	-	421	3,318	1,377	1,033	688	-	470
0	-17.8	Q(Btu/h)	14,312	7,985	5,989	3,992	1,996	1,773	17,809	9,740	7,305	4,870	2,435	-	2,162	15,413	12,116	9,087	6,058	3,029	2,690
			W	3,223	1,255	942	628	314	442	3,088	1,149	862	574	287	-	405	2,954	1,233	924	616	308
-4	-20.0	Q(Btu/h)	12,158	6,811	5,108	3,405	1,703	1,319	16,057	8,730	6,547	4,365	2,182	-	1,691	13,093	12,538	9,404	6,269	3,135	2,429
			W	3,071	1,193	895	596	298	431	2,925	1,080	810	540	270	-	390	2,780	1,158	869	579	290
-13	-25.0	Q(Btu/h)	7,312	4,208	3,156	2,104	1,052	280	12,113	6,457	4,843	3,228	1,614	-	631	7,874	9,857	7,393	4,928	2,464	1,075
			W	2,924	1,055	791	528	264	354	2,720	920	690	460	230	-	354	2,516	1,124	843	562	281

* Above data is for heating operation without any frost.



**MLZ-KX09NL
SUZ-AA09NLHZ
1) COOLING**

Rated
Q(Btu/h): 9,000
W: 730

		71°F / 21.7°C						67°F / 19.4°C						63°F / 17.2°C						
Indoor W.B.	Outdoor D.B.	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	
115	46.1	Q(Btu/h)	8,216	8,216	6,162	-	-	4,564	7,693	7,693	5,770	-	-	4,274	7,021	7,021	5,266	-	-	3,900
			W	820	820	615	-	-	427	800	800	600	-	-	416	767	767	575	-	-
110	43.3	Q(Btu/h)	8,589	8,589	6,442	-	-	4,772	7,992	7,992	5,994	-	-	4,440	7,320	7,320	5,490	-	-	4,066
			W	807	807	605	-	-	420	787	787	590	-	-	409	750	750	563	-	-
105	40.6	Q(Btu/h)	8,963	8,963	6,722	-	-	4,979	8,290	8,290	6,218	-	-	4,606	7,693	7,693	5,770	-	-	4,274
			W	797	797	598	-	-	415	767	767	575	-	-	399	733	733	550	-	-
100	37.8	Q(Btu/h)	9,261	9,261	6,946	-	-	5,145	8,664	8,664	6,498	-	-	4,813	7,992	7,992	5,994	-	-	4,440
			W	773	773	580	-	-	403	750	750	563	-	-	390	717	717	538	-	-
95	35.0	Q(Btu/h)	9,635	9,635	7,226	-	-	5,353	9,000	9,000	6,750	-	-	5,000	8,365	8,365	6,274	-	-	4,647
			W	760	760	570	-	-	396	730	730	548	-	-	380	700	700	525	-	-
90	32.2	Q(Btu/h)	9,934	9,934	7,450	-	-	5,519	9,336	9,336	7,002	-	-	5,187	8,664	8,664	6,498	-	-	4,813
			W	733	733	550	-	-	382	700	700	525	-	-	364	673	673	505	-	-
85	29.4	Q(Btu/h)	10,307	10,307	7,730	-	-	5,726	9,710	9,710	7,282	-	-	5,394	9,037	9,037	6,778	-	-	5,021
			W	707	707	530	-	-	368	673	673	505	-	-	351	650	650	488	-	-
80	26.7	Q(Btu/h)	10,606	10,606	7,954	-	-	5,892	10,008	10,008	7,506	-	-	5,560	9,411	9,411	7,058	-	-	5,228
			W	680	680	510	-	-	354	643	643	483	-	-	335	623	623	468	-	-
75	23.9	Q(Btu/h)	10,979	10,979	8,234	-	-	6,100	10,307	10,307	7,730	-	-	5,726	9,747	9,747	7,310	-	-	5,415
			W	650	650	488	-	-	338	613	613	460	-	-	319	599	599	450	-	-
70	21.1	Q(Btu/h)	11,241	11,241	8,430	-	-	6,245	10,531	10,531	7,898	-	-	5,851	10,083	10,083	7,562	-	-	5,602
			W	617	617	463	-	-	321	587	587	440	-	-	305	563	563	423	-	-
67	19.4	Q(Btu/h)	11,353	11,353	8,515	-	-	6,307	10,755	10,755	8,066	-	-	5,975	10,307	10,307	7,730	-	-	5,726
			W	587	587	440	-	-	305	563	563	423	-	-	293	533	533	400	-	-

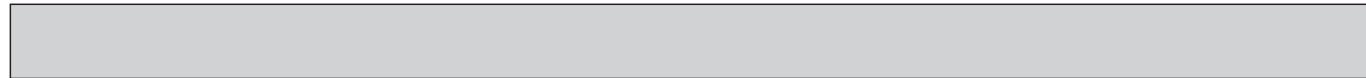
* It may not reach the above capacities in low ambient temperatures.

**MLZ-KX09NL
SUZ-AA09NLHZ**
2) HEATING

Rated
Q(Btu/h): 11,400
W: 960

Indoor D.B. Outdoor W.B. (°F) (°C)			77°F / 25.0°C						68°F / 20.0°C						59°F / 15.0°C						
			Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	
65	18.3	Q(Btu/h)	17,545	10,937	8,203	-	-	9,420	18,125	11,400	8,550	-	-	9,818	18,705	11,472	8,604	-	-	9,880	
			W	1,191	1,122	841	-	-	494	1,166	1,087	815	-	-	479	1,141	1,018	763	-	-	448
60	15.6	Q(Btu/h)	16,820	10,934	8,201	-	-	8,852	17,400	11,400	8,550	-	-	9,229	17,980	11,680	8,760	-	-	9,456	
			W	1,189	1,090	818	-	-	499	1,163	1,054	790	-	-	482	1,138	991	743	-	-	453
55	12.8	Q(Btu/h)	16,095	10,924	8,193	-	-	8,279	16,675	11,400	8,550	-	-	8,640	17,255	11,923	8,942	-	-	9,037	
			W	1,203	1,057	793	-	-	502	1,177	1,019	764	-	-	484	1,150	968	726	-	-	459
50	10.0	Q(Btu/h)	15,370	10,903	8,178	-	-	7,701	15,878	11,400	8,550	-	-	8,052	16,458	12,156	9,117	-	-	8,586	
			W	1,234	1,024	768	-	-	503	1,206	984	738	-	-	484	1,178	949	712	-	-	467
45	7.2	Q(Btu/h)	11,229	10,715	8,036	-	-	7,117	11,685	11,234	8,426	-	-	7,463	12,141	12,249	9,187	-	-	8,137	
			W	1,281	989	742	-	-	503	1,251	948	711	-	-	482	1,222	929	697	-	-	473
40	4.4	Q(Btu/h)	10,944	10,278	7,709	-	-	6,529	11,400	10,820	8,115	-	-	6,874	11,856	12,327	9,245	-	-	7,831	
			W	1,345	954	715	-	-	501	1,313	911	683	-	-	479	1,281	918	688	-	-	483
35	1.7	Q(Btu/h)	10,944	9,831	7,373	-	-	5,937	11,400	10,406	7,804	-	-	6,285	11,856	12,100	9,075	-	-	7,308	
			W	1,458	917	688	-	-	498	1,391	873	655	-	-	474	1,301	901	676	-	-	489
30	-1.1	Q(Btu/h)	10,944	9,257	6,943	-	-	5,342	11,400	9,870	7,402	-	-	5,696	11,856	11,453	8,590	-	-	6,609	
			W	1,545	880	660	-	-	493	1,484	835	626	-	-	468	1,404	865	649	-	-	485
25	-3.9	Q(Btu/h)	10,944	8,500	6,375	-	-	4,744	11,400	9,150	6,862	-	-	5,107	11,856	11,139	8,354	-	-	6,217	
			W	1,654	841	631	-	-	486	1,594	796	597	-	-	460	1,514	853	640	-	-	493
20	-6.7	Q(Btu/h)	10,944	7,735	5,801	-	-	4,145	11,400	8,430	6,323	-	-	4,518	11,856	10,531	7,898	-	-	5,644	
			W	1,781	802	602	-	-	478	1,720	755	567	-	-	450	1,639	818	613	-	-	488
15	-9.4	Q(Btu/h)	10,944	6,958	5,219	-	-	3,546	11,400	7,711	5,783	-	-	3,929	11,856	9,864	7,398	-	-	5,026	
			W	1,785	763	572	-	-	469	1,726	714	536	-	-	439	1,648	787	590	-	-	484
10	-12.2	Q(Btu/h)	10,944	6,170	4,628	3,085	-	2,948	11,400	6,991	5,243	3,495	-	3,340	11,856	9,199	6,899	4,599	-	4,395	
			W	1,789	722	542	361	-	458	1,732	673	505	336	-	427	1,656	747	561	374	-	474
5	-15.0	Q(Btu/h)	10,944	5,369	4,027	2,685	-	2,355	11,400	6,271	4,703	3,136	-	2,751	11,856	8,335	6,251	4,168	-	3,656	
			W	1,688	661	496	331	-	433	1,686	611	458	306	-	400	1,565	682	511	341	-	446
0	-17.8	Q(Btu/h)	9,519	4,551	3,414	2,276	-	1,773	10,151	5,552	4,164	2,776	-	2,162	10,252	6,906	5,180	3,453	-	2,690	
			W	1,666	641	481	321	-	433	1,596	587	440	293	-	396	1,526	629	472	315	-	425
-4	-20.0	Q(Btu/h)	8,087	3,882	2,912	1,941	-	1,319	9,152	4,976	3,732	2,488	-	1,691	8,709	7,147	5,360	3,573	-	2,429	
			W	1,587	609	457	305	-	422	1,512	551	413	276	-	382	1,436	592	444	296	-	410
-13	-25.0	Q(Btu/h)	4,863	2,399	1,799	1,199	600	280	6,905	3,680	2,760	1,840	920	-	631	5,237	5,618	4,214	2,809	1,405	1,075
			W	1,511	539	404	269	135	347	1,406	470	352	235	117	347	1,300	574	431	287	144	418

* Above data is for heating operation without any frost.



**MLZ-KX12NL
SUZ-AA12NLHZ
1) COOLING**

Rated
Q(Btu/h): 12,000
W: 900

Indoor W.B. Outdoor D.B. (°F) (°C)			71°F / 21.7°C						67°F / 19.4°C						63°F / 17.2°C					
			Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min
115	46.1	Q(Btu/h)	10,954	10,954	8,216	5,477	-	4,564	10,257	10,257	7,693	5,129	-	4,274	9,361	9,361	7,021	4,680	-	3,900
			W	1,011	1,011	758	505	-	427	986	986	740	493	-	416	945	945	709	473	-
110	43.3	Q(Btu/h)	11,452	11,452	8,589	5,726	-	4,772	10,656	10,656	7,992	5,328	-	4,440	9,759	9,759	7,320	4,880	-	4,066
			W	995	995	746	497	-	420	970	970	727	485	-	409	925	925	693	462	-
105	40.6	Q(Btu/h)	11,950	11,950	8,963	5,975	-	4,979	11,054	11,054	8,290	5,527	-	4,606	10,257	10,257	7,693	5,129	-	4,274
			W	982	982	737	491	-	415	945	945	709	473	-	399	904	904	678	452	-
100	37.8	Q(Btu/h)	12,349	12,349	9,261	6,174	-	5,145	11,552	11,552	8,664	5,776	-	4,813	10,656	10,656	7,992	5,328	-	4,440
			W	953	953	715	477	-	403	925	925	693	462	-	390	884	884	663	442	-
95	35.0	Q(Btu/h)	12,846	12,846	9,635	6,423	-	5,353	12,000	12,000	9,000	6,000	-	5,000	11,154	11,154	8,365	5,577	-	4,647
			W	937	937	703	468	-	396	900	900	675	450	-	380	863	863	647	432	-
90	32.2	Q(Btu/h)	13,245	13,245	9,934	6,622	-	5,519	12,448	12,448	9,336	6,224	-	5,187	11,552	11,552	8,664	5,776	-	4,813
			W	904	904	678	452	-	382	863	863	647	432	-	364	830	830	623	415	-
85	29.4	Q(Btu/h)	13,743	13,743	10,307	6,871	-	5,726	12,946	12,946	9,710	6,473	-	5,394	12,050	12,050	9,037	6,025	-	5,021
			W	871	871	653	436	-	368	830	830	623	415	-	351	801	801	601	401	-
80	26.7	Q(Btu/h)	14,141	14,141	10,606	7,071	-	5,892	13,344	13,344	10,008	6,672	-	5,560	12,548	12,548	9,411	6,274	-	5,228
			W	838	838	629	419	-	354	793	793	595	397	-	335	768	768	576	384	-
75	23.9	Q(Btu/h)	14,639	14,639	10,979	7,320	-	6,100	13,743	13,743	10,307	6,871	-	5,726	12,996	12,996	9,747	6,498	-	5,415
			W	801	801	601	401	-	338	756	756	567	378	-	319	739	739	554	369	-
70	21.1	Q(Btu/h)	14,988	14,988	11,241	7,494	-	6,245	14,041	14,041	10,531	7,021	-	5,851	13,444	13,444	10,083	6,722	-	5,602
			W	760	760	570	380	-	321	723	723	542	362	-	305	695	695	521	347	-
67	19.4	Q(Btu/h)	15,137	15,137	11,353	7,568	-	6,307	14,340	14,340	10,755	7,170	-	5,975	13,743	13,743	10,307	6,871	-	5,726
			W	723	723	542	362	-	305	695	695	521	347	-	293	658	658	493	329	-

* It may not reach the above capacities in low ambient temperatures.

**MLZ-KX12NL
SUZ-AA12NLHZ**
2) HEATING

Rated
Q(Btu/h): 15,000
W: 1,330

Indoor D.B. Outdoor W.B. (°F) (°C)			77°F / 25.0°C						68°F / 20.0°C						59°F / 15.0°C						
			Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	
65	18.3	Q(Btu/h)	21,780	14,391	10,793	-	-	9,420	22,500	15,000	11,250	-	-	9,818	23,220	15,094	11,321	-	-	9,880	
			W	1,628	1,554	1,165	-	-	494	1,594	1,506	1,130	-	-	479	1,559	1,410	1,057	-	-	448
60	15.6	Q(Btu/h)	20,880	14,387	10,791	-	-	8,852	21,600	15,000	11,250	-	-	9,229	22,320	15,368	11,526	-	-	9,456	
			W	1,625	1,510	1,133	-	-	499	1,590	1,460	1,095	-	-	482	1,555	1,373	1,030	-	-	453
55	12.8	Q(Btu/h)	19,980	14,373	10,780	-	-	8,279	20,700	15,000	11,250	-	-	8,640	21,420	15,688	11,766	-	-	9,037	
			W	1,644	1,465	1,099	-	-	502	1,608	1,412	1,059	-	-	484	1,572	1,342	1,006	-	-	459
50	10.0	Q(Btu/h)	19,080	14,347	10,760	-	-	7,701	19,710	15,000	11,250	-	-	8,052	20,430	15,995	11,996	-	-	8,586	
			W	1,686	1,418	1,064	-	-	503	1,648	1,363	1,022	-	-	484	1,610	1,315	986	-	-	467
45	7.2	Q(Btu/h)	14,775	14,098	10,574	-	-	7,117	15,375	14,782	11,086	-	-	7,463	15,975	16,118	12,088	-	-	8,137	
			W	1,750	1,370	1,028	-	-	503	1,710	1,313	985	-	-	482	1,670	1,287	965	-	-	473
40	4.4	Q(Btu/h)	14,400	13,524	10,143	6,762	-	6,529	15,000	14,237	10,678	7,118	-	6,874	15,600	16,219	12,165	8,110	-	7,831	
			W	1,837	1,321	991	661	-	501	1,794	1,262	947	631	-	479	1,751	1,271	954	636	-	483
35	1.7	Q(Btu/h)	14,400	12,935	9,702	6,468	-	5,937	15,000	13,692	10,269	6,846	-	6,285	15,600	15,922	11,941	7,961	-	7,308	
			W	1,992	1,270	953	635	-	498	1,900	1,210	908	605	-	474	1,778	1,248	936	624	-	489
30	-1.1	Q(Btu/h)	14,400	12,180	9,135	6,090	-	5,342	15,000	12,986	9,740	6,493	-	5,696	15,600	15,069	11,302	7,535	-	6,609	
			W	2,111	1,219	914	609	-	493	2,028	1,157	868	578	-	468	1,918	1,199	899	599	-	485
25	-3.9	Q(Btu/h)	14,400	11,185	8,389	5,592	-	4,744	15,000	12,039	9,029	6,020	-	5,107	15,600	14,656	10,992	7,328	-	6,217	
			W	2,260	1,166	874	583	-	486	2,178	1,102	827	551	-	460	2,069	1,182	886	591	-	493
20	-6.7	Q(Btu/h)	14,400	10,177	7,633	5,088	-	4,145	15,000	11,092	8,319	5,546	-	4,518	15,600	13,856	10,392	6,928	-	5,644	
			W	2,434	1,111	834	556	-	478	2,350	1,047	785	523	-	450	2,239	1,133	849	566	-	488
15	-9.4	Q(Btu/h)	14,400	9,155	6,867	4,578	-	3,546	15,000	10,145	7,609	5,073	-	3,929	15,600	12,979	9,734	6,489	-	5,026	
			W	2,631	1,056	792	528	-	469	2,544	990	742	495	-	439	2,429	1,091	818	545	-	484
10	-12.2	Q(Btu/h)	14,400	8,119	6,089	4,059	-	2,948	15,000	9,199	6,899	4,599	-	3,340	15,600	12,104	9,078	6,052	-	4,395	
			W	2,689	1,001	750	500	-	458	2,603	932	699	466	-	427	2,489	1,036	777	518	-	474
5	-15.0	Q(Btu/h)	14,400	7,064	5,298	3,532	-	2,355	15,000	8,252	6,189	4,126	-	2,751	15,600	10,967	8,225	5,484	-	3,656	
			W	2,586	916	687	458	-	433	2,583	847	635	423	-	400	2,397	945	709	472	-	446
0	-17.8	Q(Btu/h)	11,817	5,989	4,491	2,994	-	1,773	13,357	7,305	5,479	3,652	-	2,162	12,726	9,087	6,815	4,544	-	2,690	
			W	2,551	888	666	444	-	433	2,445	813	610	406	-	396	2,338	872	654	436	-	425
-4	-20.0	Q(Btu/h)	10,039	5,108	3,831	2,554	-	1,319	12,043	6,547	4,910	3,274	-	1,691	10,811	9,404	7,053	4,702	-	2,429	
			W	2,431	844	633	422	-	422	2,315	764	573	382	-	382	2,200	820	615	410	-	410
-13	-25.0	Q(Btu/h)	6,037	3,156	2,367	1,578	789	280	9,085	4,843	3,632	2,421	1,211	-	631	6,502	7,393	5,545	3,696	1,848	1,075
			W	2,314	747	560	373	187	347	2,153	651	488	325	163	-	347	1,992	795	597	398	199

* Above data is for heating operation without any frost.

**MLZ-KX18NL
SUZ-AA18NLHZ**
1) COOLING

Rated
Q(Btu/h): 16,400
W: 1,390

Indoor W.B. Outdoor D.B. (°F) (°C)			71°F / 21.7°C						67°F / 19.4°C						63°F / 17.2°C					
			Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min
115	46.1	Q(Btu/h)	14,971	14,971	11,228	7,485	-	4,656	14,018	14,018	10,514	7,009	-	4,359	12,793	12,793	9,595	6,397	-	3,978
			W	1,561	1,561	1,171	781	-	427	1,523	1,523	1,142	762	-	416	1,460	1,460	1,095	730	-
110	43.3	Q(Btu/h)	15,651	15,651	11,739	7,826	-	4,867	14,563	14,563	10,922	7,281	-	4,529	13,338	13,338	10,003	6,669	-	4,148
			W	1,536	1,536	1,152	768	-	420	1,498	1,498	1,123	749	-	409	1,428	1,428	1,071	714	-
105	40.6	Q(Btu/h)	16,332	16,332	12,249	8,166	-	5,079	15,107	15,107	11,330	7,554	-	4,698	14,018	14,018	10,514	7,009	-	4,359
			W	1,517	1,517	1,138	758	-	415	1,460	1,460	1,095	730	-	399	1,396	1,396	1,047	698	-
100	37.8	Q(Btu/h)	16,876	16,876	12,657	8,438	-	5,248	15,788	15,788	11,841	7,894	-	4,910	14,563	14,563	10,922	7,281	-	4,529
			W	1,473	1,473	1,104	736	-	403	1,428	1,428	1,071	714	-	390	1,365	1,365	1,023	682	-
95	35.0	Q(Btu/h)	17,557	17,557	13,168	8,778	-	5,460	16,400	16,400	12,300	8,200	-	5,100	15,243	15,243	11,432	7,622	-	4,740
			W	1,447	1,447	1,085	724	-	396	1,390	1,390	1,043	695	-	380	1,333	1,333	1,000	666	-
90	32.2	Q(Btu/h)	18,101	18,101	13,576	9,051	-	5,629	17,012	17,012	12,759	8,506	-	5,290	15,788	15,788	11,841	7,894	-	4,910
			W	1,396	1,396	1,047	698	-	382	1,333	1,333	1,000	666	-	364	1,282	1,282	962	641	-
85	29.4	Q(Btu/h)	18,782	18,782	14,086	9,391	-	5,841	17,693	17,693	13,270	8,846	-	5,502	16,468	16,468	12,351	8,234	-	5,121
			W	1,346	1,346	1,009	673	-	368	1,282	1,282	962	641	-	351	1,238	1,238	928	619	-
80	26.7	Q(Btu/h)	19,326	19,326	14,495	9,663	-	6,010	18,237	18,237	13,678	9,119	-	5,671	17,149	17,149	12,861	8,574	-	5,333
			W	1,295	1,295	971	647	-	354	1,225	1,225	919	612	-	335	1,187	1,187	890	593	-
75	23.9	Q(Btu/h)	20,007	20,007	15,005	10,003	-	6,222	18,782	18,782	14,086	9,391	-	5,841	17,761	17,761	13,321	8,880	-	5,523
			W	1,238	1,238	928	619	-	338	1,168	1,168	876	584	-	319	1,141	1,141	856	571	-
70	21.1	Q(Btu/h)	20,483	20,483	15,362	10,241	-	6,370	19,190	19,190	14,393	9,595	-	5,968	18,373	18,373	13,780	9,187	-	5,714
			W	1,174	1,174	881	587	-	321	1,117	1,117	838	559	-	305	1,073	1,073	804	536	-
67	19.4	Q(Btu/h)	20,687	20,687	15,515	10,344	-	6,433	19,598	19,598	14,699	9,799	-	6,095	18,782	18,782	14,086	9,391	-	5,841
			W	1,117	1,117	838	559	-	305	1,073	1,073	804	536	-	293	1,016	1,016	762	508	-

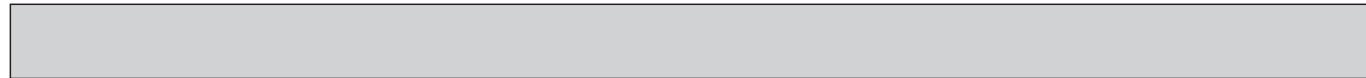
* It may not reach the above capacities in low ambient temperatures.

**MLZ-KX18NL
SUZ-AA18NLHZ**
2) HEATING

Rated
Q(Btu/h): 18,400
W: 1,620

Indoor D.B. Outdoor W.B. (°F) (°C)			77°F / 25.0°C						68°F / 20.0°C						59°F / 15.0°C					
			Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min
65	18.3	Q(Btu/h)	25,410	17,653	13,240	-	-	9,658	26,250	18,400	13,800	-	-	10,067	27,090	18,516	13,887	-	-	10,130
			W	1,892	1,893	1,420	-	-	494	1,852	1,834	1,376	-	-	479	1,812	1,717	1,288	-	-
60	15.6	Q(Btu/h)	24,360	17,649	13,236	-	-	9,077	25,200	18,400	13,800	-	-	9,463	26,040	18,851	14,138	-	-	9,695
			W	1,888	1,840	1,380	-	-	499	1,847	1,778	1,333	-	-	482	1,807	1,673	1,254	-	-
55	12.8	Q(Btu/h)	23,310	17,631	13,223	8,816	-	8,489	24,150	18,400	13,800	9,200	-	8,859	24,990	19,245	14,433	9,622	-	9,266
			W	1,910	1,785	1,338	892	-	502	1,868	1,720	1,290	860	-	484	1,826	1,634	1,226	817	-
50	10.0	Q(Btu/h)	22,260	17,599	13,199	8,799	-	7,896	22,995	18,400	13,800	9,200	-	8,255	23,835	19,621	14,716	9,810	-	8,803
			W	1,959	1,728	1,296	864	-	503	1,915	1,660	1,245	830	-	484	1,871	1,602	1,201	801	-
45	7.2	Q(Btu/h)	18,124	17,294	12,970	8,647	-	7,298	18,860	18,133	13,599	9,066	-	7,652	19,596	19,771	14,828	9,885	-	8,343
			W	2,033	1,669	1,252	835	-	503	1,987	1,600	1,200	800	-	482	1,941	1,568	1,176	784	-
40	4.4	Q(Btu/h)	17,664	16,589	12,442	8,295	-	6,695	18,400	17,464	13,098	8,732	-	7,048	19,136	19,896	14,922	9,948	-	8,029
			W	2,135	1,609	1,207	805	-	501	2,085	1,537	1,153	769	-	479	2,034	1,549	1,161	774	-
35	1.7	Q(Btu/h)	17,664	15,867	11,901	7,934	-	6,088	18,400	16,795	12,597	8,398	-	6,444	19,136	19,530	14,648	9,765	-	7,493
			W	2,315	1,547	1,161	774	-	498	2,208	1,474	1,105	737	-	474	2,066	1,520	1,140	760	-
30	-1.1	Q(Btu/h)	17,664	14,941	11,206	7,470	-	5,477	18,400	15,930	11,947	7,965	-	5,840	19,136	18,485	13,864	9,243	-	6,777
			W	2,453	1,484	1,113	742	-	493	2,357	1,409	1,057	704	-	468	2,229	1,460	1,095	730	-
25	-3.9	Q(Btu/h)	17,664	13,720	10,290	6,860	-	4,865	18,400	14,768	11,076	7,384	-	5,236	19,136	17,978	13,484	8,989	-	6,374
			W	2,626	1,420	1,065	710	-	486	2,531	1,343	1,007	671	-	460	2,405	1,440	1,080	720	-
20	-6.7	Q(Btu/h)	17,664	12,484	9,363	6,242	-	4,250	18,400	13,607	10,205	6,803	-	4,632	19,136	16,997	12,748	8,498	-	5,786
			W	2,828	1,354	1,015	677	-	478	2,731	1,275	956	637	-	450	2,602	1,380	1,035	690	-
15	-9.4	Q(Btu/h)	17,664	11,231	8,423	5,615	-	3,635	18,400	12,445	9,334	6,223	-	4,028	19,136	15,921	11,941	7,960	-	5,154
			W	3,057	1,287	965	643	-	469	2,957	1,206	904	603	-	439	2,823	1,328	996	664	-
10	-12.2	Q(Btu/h)	17,664	9,959	7,469	4,980	-	3,023	18,400	11,284	8,463	5,642	-	3,425	19,136	14,847	11,136	7,424	-	4,506
			W	3,313	1,219	914	609	-	458	3,208	1,135	851	568	-	427	3,067	1,261	946	631	-
5	-15.0	Q(Btu/h)	17,664	8,666	6,499	4,333	-	2,415	18,400	10,122	7,592	5,061	-	2,821	19,136	13,453	10,090	6,727	-	3,749
			W	3,283	1,116	837	558	-	433	3,278	1,031	774	516	-	400	3,043	1,151	863	575	-
0	-17.8	Q(Btu/h)	13,787	7,346	5,510	3,673	1,837	1,817	16,385	8,960	6,720	4,480	2,240	2,217	14,847	11,147	8,360	5,574	2,787	2,758
			W	3,239	1,082	811	541	270	433	3,103	990	742	495	247	396	2,968	1,062	797	531	266
-4	-20.0	Q(Btu/h)	11,712	6,266	4,699	3,133	1,566	1,353	14,772	8,031	6,023	4,016	2,008	1,734	12,613	11,535	8,651	5,768	2,884	2,490
			W	3,086	1,028	771	514	257	422	2,939	930	698	465	233	382	2,793	998	749	499	250
-13	-25.0	Q(Btu/h)	7,043	3,872	2,904	1,936	968	287	11,144	5,940	4,455	2,970	1,485	647	7,585	9,068	6,801	4,534	2,267	1,102
			W	2,938	909	682	455	227	347	2,733	793	595	396	198	347	2,528	969	727	484	242

* Above data is for heating operation without any frost.



**MFZ-KX09NL
SUZ-AA09NLHZ
1) COOLING**

Rated
Q(Btu/h): 9,000
W: 720

		71°F / 21.7°C						67°F / 19.4°C						63°F / 17.2°C						
Indoor W.B.	Outdoor D.B.	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	
115	46.1	Q(Btu/h)	8,216	8,216	6,162	-	-	4,473	7,693	7,693	5,770	-	-	4,188	7,021	7,021	5,266	-	-	3,822
			W	809	809	607	-	-	416	789	789	592	-	-	405	756	756	567	-	-
110	43.3	Q(Btu/h)	8,589	8,589	6,442	-	-	4,676	7,992	7,992	5,994	-	-	4,351	7,320	7,320	5,490	-	-	3,985
			W	796	796	597	-	-	409	776	776	582	-	-	399	740	740	555	-	-
105	40.6	Q(Btu/h)	8,963	8,963	6,722	-	-	4,880	8,290	8,290	6,218	-	-	4,514	7,693	7,693	5,770	-	-	4,188
			W	786	786	589	-	-	404	756	756	567	-	-	389	723	723	542	-	-
100	37.8	Q(Btu/h)	9,261	9,261	6,946	-	-	5,042	8,664	8,664	6,498	-	-	4,717	7,992	7,992	5,994	-	-	4,351
			W	763	763	572	-	-	392	740	740	555	-	-	380	707	707	530	-	-
95	35.0	Q(Btu/h)	9,635	9,635	7,226	-	-	5,246	9,000	9,000	6,750	-	-	4,900	8,365	8,365	6,274	-	-	4,554
			W	750	750	562	-	-	385	720	720	540	-	-	370	690	690	518	-	-
90	32.2	Q(Btu/h)	9,934	9,934	7,450	-	-	5,408	9,336	9,336	7,002	-	-	5,083	8,664	8,664	6,498	-	-	4,717
			W	723	723	542	-	-	372	690	690	518	-	-	355	664	664	498	-	-
85	29.4	Q(Btu/h)	10,307	10,307	7,730	-	-	5,612	9,710	9,710	7,282	-	-	5,286	9,037	9,037	6,778	-	-	4,920
			W	697	697	523	-	-	358	664	664	498	-	-	341	641	641	481	-	-
80	26.7	Q(Btu/h)	10,606	10,606	7,954	-	-	5,774	10,008	10,008	7,506	-	-	5,449	9,411	9,411	7,058	-	-	5,124
			W	671	671	503	-	-	345	635	635	476	-	-	326	615	615	461	-	-
75	23.9	Q(Btu/h)	10,979	10,979	8,234	-	-	5,978	10,307	10,307	7,730	-	-	5,612	9,747	9,747	7,310	-	-	5,307
			W	641	641	481	-	-	329	605	605	454	-	-	311	591	591	443	-	-
70	21.1	Q(Btu/h)	11,241	11,241	8,430	-	-	6,120	10,531	10,531	7,898	-	-	5,734	10,083	10,083	7,562	-	-	5,490
			W	608	608	456	-	-	313	579	579	434	-	-	297	556	556	417	-	-
67	19.4	Q(Btu/h)	11,353	11,353	8,515	-	-	6,181	10,755	10,755	8,066	-	-	5,856	10,307	10,307	7,730	-	-	5,612
			W	579	579	434	-	-	297	556	556	417	-	-	286	526	526	395	-	-

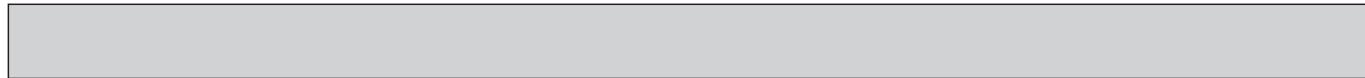
* It may not reach the above capacities in low ambient temperatures.

**MFZ-KX09NL
SUZ-AA09NLHZ**
2) HEATING

Rated
Q(Btu/h): 12,000
W: 910

Indoor D.B. Outdoor W.B. (°F) (°C)			77°F / 25.0°C						68°F / 20.0°C						59°F / 15.0°C						
			Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	
65	18.3	Q(Btu/h)	18,150	11,513	8,635	-	-	9,778	18,750	12,000	9,000	-	-	10,191	19,350	12,075	9,057	-	-	10,255	
			W	1,091	1,063	797	-	-	484	1,068	1,030	773	-	-	469	1,045	965	724	-	-	439
60	15.6	Q(Btu/h)	17,400	11,510	8,632	-	-	9,189	18,000	12,000	9,000	-	-	9,580	18,600	12,294	9,221	-	-	9,815	
			W	1,089	1,033	775	-	-	488	1,066	999	749	-	-	472	1,042	940	705	-	-	444
55	12.8	Q(Btu/h)	16,650	11,498	8,624	-	-	8,594	17,250	12,000	9,000	-	-	8,969	17,850	12,551	9,413	-	-	9,380	
			W	1,102	1,002	752	-	-	491	1,078	966	725	-	-	474	1,054	918	688	-	-	450
50	10.0	Q(Btu/h)	15,900	11,477	8,608	-	-	7,993	16,425	12,000	9,000	-	-	8,357	17,025	12,796	9,597	-	-	8,912	
			W	1,130	970	728	-	-	493	1,105	933	700	-	-	474	1,079	900	675	-	-	457
45	7.2	Q(Btu/h)	11,820	11,278	8,459	-	-	7,388	12,300	11,826	8,869	-	-	7,746	12,780	12,894	9,671	-	-	8,446	
			W	1,173	938	703	-	-	493	1,146	899	674	-	-	472	1,120	881	661	-	-	463
40	4.4	Q(Btu/h)	11,520	10,819	8,114	-	-	6,777	12,000	11,390	8,542	-	-	7,135	12,480	12,975	9,732	-	-	8,128	
			W	1,232	904	678	-	-	491	1,203	864	648	-	-	469	1,174	870	652	-	-	472
35	1.7	Q(Btu/h)	11,520	10,348	7,761	-	-	6,163	12,000	10,954	8,215	-	-	6,523	12,480	12,737	9,553	-	-	7,586	
			W	1,335	869	652	-	-	488	1,274	828	621	-	-	464	1,192	854	641	-	-	479
30	-1.1	Q(Btu/h)	11,520	9,744	7,308	-	-	5,545	12,000	10,389	7,792	-	-	5,912	12,480	12,055	9,042	-	-	6,860	
			W	1,415	834	625	-	-	483	1,360	791	594	-	-	458	1,286	820	615	-	-	475
25	-3.9	Q(Btu/h)	11,520	8,948	6,711	-	-	4,925	12,000	9,631	7,224	-	-	5,301	12,480	11,725	8,794	-	-	6,453	
			W	1,515	797	598	-	-	476	1,460	754	566	-	-	450	1,387	809	607	-	-	483
20	-6.7	Q(Btu/h)	11,520	8,142	6,106	-	-	4,302	12,000	8,874	6,655	-	-	4,689	12,480	11,085	8,314	-	-	5,858	
			W	1,632	760	570	-	-	468	1,576	716	537	-	-	441	1,501	775	581	-	-	477
15	-9.4	Q(Btu/h)	11,520	7,324	5,493	-	-	3,680	12,000	8,116	6,087	-	-	4,078	12,480	10,383	7,787	-	-	5,217	
			W	1,652	723	542	-	-	459	1,598	677	508	-	-	430	1,525	746	560	-	-	474
10	-12.2	Q(Btu/h)	11,520	6,495	4,871	3,248	-	3,060	12,000	7,359	5,519	3,679	-	3,467	12,480	9,683	7,262	4,842	-	4,562	
			W	1,673	685	513	342	-	448	1,620	638	478	319	-	418	1,548	709	531	354	-	464
5	-15.0	Q(Btu/h)	11,520	5,652	4,239	2,826	-	2,445	12,000	6,601	4,951	3,301	-	2,856	12,480	8,774	6,580	4,387	-	3,795	
			W	1,694	646	485	323	-	437	1,641	597	448	299	-	404	1,571	666	500	333	-	450
0	-17.8	Q(Btu/h)	9,848	4,791	3,593	2,395	-	1,840	10,686	5,844	4,383	2,922	-	2,244	10,605	7,270	5,452	3,635	-	2,792	
			W	1,526	608	456	304	-	424	1,462	556	417	278	-	388	1,398	597	447	298	-	416
-4	-20.0	Q(Btu/h)	8,365	4,086	3,065	2,043	-	1,369	9,634	5,238	3,928	2,619	-	1,755	9,009	7,523	5,642	3,761	-	2,521	
			W	1,454	577	433	289	-	414	1,385	523	392	261	-	374	1,316	561	421	280	-	402
-13	-25.0	Q(Btu/h)	5,031	2,525	1,894	1,263	631	291	7,268	3,874	2,906	1,937	969	-	655	5,418	5,914	4,436	2,957	1,479	1,116
			W	1,384	511	383	255	128	340	1,288	445	334	223	111	-	340	1,191	544	408	272	136

* Above data is for heating operation without any frost.



**MFZ-KX12NL
SUZ-AA12NLHZ
1) COOLING**

Rated
Q(Btu/h): 12,000
W: 860

Indoor W.B. Outdoor D.B. (°F) (°C)		71°F / 21.7°C						67°F / 19.4°C						63°F / 17.2°C						
		Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	
115	46.1	Q(Btu/h)	10,954	10,954	8,216	5,477	-	4,473	10,257	10,257	7,693	5,129	-	4,188	9,361	9,361	7,021	4,680	-	3,822
		W	966	966	725	483	-	416	942	942	707	471	-	405	903	903	677	452	-	389
110	43.3	Q(Btu/h)	11,452	11,452	8,589	5,726	-	4,676	10,656	10,656	7,992	5,328	-	4,351	9,759	9,759	7,320	4,880	-	3,985
		W	950	950	713	475	-	409	927	927	695	463	-	399	884	884	663	442	-	380
105	40.6	Q(Btu/h)	11,950	11,950	8,963	5,975	-	4,880	11,054	11,054	8,290	5,527	-	4,514	10,257	10,257	7,693	5,129	-	4,188
		W	939	939	704	469	-	404	903	903	677	452	-	389	864	864	648	432	-	372
100	37.8	Q(Btu/h)	12,349	12,349	9,261	6,174	-	5,042	11,552	11,552	8,664	5,776	-	4,717	10,656	10,656	7,992	5,328	-	4,351
		W	911	911	683	456	-	392	884	884	663	442	-	380	844	844	633	422	-	363
95	35.0	Q(Btu/h)	12,846	12,846	9,635	6,423	-	5,246	12,000	12,000	9,000	6,000	-	4,900	11,154	11,154	8,365	5,577	-	4,554
		W	895	895	672	448	-	385	860	860	645	430	-	370	825	825	618	412	-	355
90	32.2	Q(Btu/h)	13,245	13,245	9,934	6,622	-	5,408	12,448	12,448	9,336	6,224	-	5,083	11,552	11,552	8,664	5,776	-	4,717
		W	864	864	648	432	-	372	825	825	618	412	-	355	793	793	595	397	-	341
85	29.4	Q(Btu/h)	13,743	13,743	10,307	6,871	-	5,612	12,946	12,946	9,710	6,473	-	5,286	12,050	12,050	9,037	6,025	-	4,920
		W	833	833	624	416	-	358	793	793	595	397	-	341	766	766	574	383	-	329
80	26.7	Q(Btu/h)	14,141	14,141	10,606	7,071	-	5,774	13,344	13,344	10,008	6,672	-	5,449	12,548	12,548	9,411	6,274	-	5,124
		W	801	801	601	401	-	345	758	758	568	379	-	326	734	734	551	367	-	316
75	23.9	Q(Btu/h)	14,639	14,639	10,979	7,320	-	5,978	13,743	13,743	10,307	6,871	-	5,612	12,996	12,996	9,747	6,498	-	5,307
		W	766	766	574	383	-	329	723	723	542	361	-	311	706	706	530	353	-	304
70	21.1	Q(Btu/h)	14,988	14,988	11,241	7,494	-	6,120	14,041	14,041	10,531	7,021	-	5,734	13,444	13,444	10,083	6,722	-	5,490
		W	726	726	545	363	-	313	691	691	518	346	-	297	664	664	498	332	-	286
67	19.4	Q(Btu/h)	15,137	15,137	11,353	7,568	-	6,181	14,340	14,340	10,755	7,170	-	5,856	13,743	13,743	10,307	6,871	-	5,612
		W	691	691	518	346	-	297	664	664	498	332	-	286	628	628	471	314	-	270

* It may not reach the above capacities in low ambient temperatures.

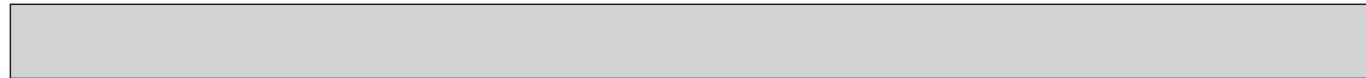
**MFZ-KX12NL
SUZ-AA12NLHZ**

Rated
Q(Btu/h): 15,000
W: 1,170

2) HEATING

Indoor D.B. Outdoor W.B. (°F) (°C)			77°F / 25.0°C						68°F / 20.0°C						59°F / 15.0°C						
			Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	
65	18.3	Q(Btu/h)	21,780	14,391	10,793	-	-	9,778	22,500	15,000	11,250	-	-	10,191	23,220	15,094	11,321	-	-	10,255	
			W	1,419	1,367	1,025	-	-	484	1,389	1,325	994	-	-	469	1,359	1,240	930	-	-	439
60	15.6	Q(Btu/h)	20,880	14,387	10,791	-	-	9,189	21,600	15,000	11,250	-	-	9,580	22,320	15,368	11,526	-	-	9,815	
			W	1,416	1,329	996	-	-	488	1,385	1,284	963	-	-	472	1,355	1,208	906	-	-	444
55	12.8	Q(Btu/h)	19,980	14,373	10,780	-	-	8,594	20,700	15,000	11,250	-	-	8,969	21,420	15,688	11,766	-	-	9,380	
			W	1,433	1,289	967	-	-	491	1,401	1,242	932	-	-	474	1,370	1,180	885	-	-	450
50	10.0	Q(Btu/h)	19,080	14,347	10,760	-	-	7,993	19,710	15,000	11,250	-	-	8,357	20,430	15,995	11,996	-	-	8,912	
			W	1,469	1,248	936	-	-	493	1,436	1,199	899	-	-	474	1,403	1,157	868	-	-	457
45	7.2	Q(Btu/h)	14,775	14,098	10,574	-	-	7,388	15,375	14,782	11,086	-	-	7,746	15,975	16,118	12,088	-	-	8,446	
			W	1,525	1,206	904	-	-	493	1,490	1,155	866	-	-	472	1,455	1,132	849	-	-	463
40	4.4	Q(Btu/h)	14,400	13,524	10,143	-	-	6,777	15,000	14,237	10,678	-	-	7,135	15,600	16,219	12,165	-	-	8,128	
			W	1,601	1,162	872	-	-	491	1,564	1,110	833	-	-	469	1,526	1,118	839	-	-	472
35	1.7	Q(Btu/h)	14,400	12,935	9,702	6,468	-	6,163	15,000	13,692	10,269	6,846	-	6,523	15,600	15,922	11,941	7,961	-	7,586	
			W	1,736	1,118	838	559	-	488	1,656	1,064	798	532	-	464	1,549	1,098	824	549	-	479
30	-1.1	Q(Btu/h)	14,400	12,180	9,135	6,090	-	5,545	15,000	12,986	9,740	6,493	-	5,912	15,600	15,069	11,302	7,535	-	6,860	
			W	1,840	1,072	804	536	-	483	1,768	1,018	763	509	-	458	1,671	1,055	791	527	-	475
25	-3.9	Q(Btu/h)	14,400	11,185	8,389	5,592	-	4,925	15,000	12,039	9,029	6,020	-	5,301	15,600	14,656	10,992	7,328	-	6,453	
			W	1,970	1,025	769	513	-	476	1,898	970	727	485	-	450	1,803	1,040	780	520	-	483
20	-6.7	Q(Btu/h)	14,400	10,177	7,633	5,088	-	4,302	15,000	11,092	8,319	5,546	-	4,689	15,600	13,856	10,392	6,928	-	5,858	
			W	2,121	978	733	489	-	468	2,048	921	691	460	-	441	1,951	996	747	498	-	477
15	-9.4	Q(Btu/h)	14,400	9,155	6,867	4,578	-	3,680	15,000	10,145	7,609	5,073	-	4,078	15,600	12,979	9,734	6,489	-	5,217	
			W	2,293	929	697	465	-	459	2,217	871	653	435	-	430	2,117	959	720	480	-	474
10	-12.2	Q(Btu/h)	14,400	8,119	6,089	4,059	-	3,060	15,000	9,199	6,899	4,599	-	3,467	15,600	12,104	9,078	6,052	-	4,562	
			W	2,381	880	660	440	-	448	2,305	820	615	410	-	418	2,203	911	683	455	-	464
5	-15.0	Q(Btu/h)	14,400	7,064	5,298	3,532	-	2,445	15,000	8,252	6,189	4,126	-	2,856	15,600	10,967	8,225	5,484	-	3,795	
			W	2,469	831	623	415	-	437	2,392	768	576	384	-	404	2,289	857	643	428	-	450
0	-17.8	Q(Btu/h)	11,817	5,989	4,491	2,994	-	1,840	13,357	7,305	5,479	3,652	-	2,244	12,726	9,087	6,815	4,544	-	2,792	
			W	2,223	781	586	391	-	424	2,131	715	536	357	-	388	2,038	767	575	384	-	416
-4	-20.0	Q(Btu/h)	10,039	5,108	3,831	2,554	-	1,369	12,043	6,547	4,910	3,274	-	1,755	10,811	9,404	7,053	4,702	-	2,521	
			W	2,118	742	557	371	-	414	2,018	672	504	336	-	374	1,917	721	541	360	-	402
-13	-25.0	Q(Btu/h)	6,037	3,156	2,367	1,578	789	291	9,085	4,843	3,632	2,421	1,211	-	655	6,502	7,393	5,545	3,696	1,848	1,116
			W	2,017	657	493	328	164	340	1,876	573	429	286	143	-	340	1,736	700	525	350	175

* Above data is for heating operation without any frost.



**MFZ-KX15NL
SUZ-AA15NLHZ
1) COOLING**

Rated
Q(Btu/h): 15,000
W: 1,170

Indoor W.B. Outdoor D.B. (°F) (°C)			71°F / 21.7°C						67°F / 19.4°C						63°F / 17.2°C					
			Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min
115	46.1	Q(Btu/h)	13,693	13,693	10,270	6,846	-	4,656	12,822	12,822	9,616	6,411	-	4,359	11,701	11,701	8,776	5,851	-	3,978
			W	1,314	1,314	986	657	-	427	1,282	1,282	962	641	-	416	1,229	1,229	922	614	-
110	43.3	Q(Btu/h)	14,315	14,315	10,737	7,158	-	4,867	13,320	13,320	9,990	6,660	-	4,529	12,199	12,199	9,149	6,100	-	4,148
			W	1,293	1,293	970	646	-	420	1,261	1,261	946	630	-	409	1,202	1,202	902	601	-
105	40.6	Q(Btu/h)	14,938	14,938	11,203	7,469	-	5,079	13,817	13,817	10,363	6,909	-	4,698	12,822	12,822	9,616	6,411	-	4,359
			W	1,277	1,277	958	638	-	415	1,229	1,229	922	614	-	399	1,175	1,175	882	588	-
100	37.8	Q(Btu/h)	15,436	15,436	11,577	7,718	-	5,248	14,440	14,440	10,830	7,220	-	4,910	13,320	13,320	9,990	6,660	-	4,529
			W	1,239	1,239	930	620	-	403	1,202	1,202	902	601	-	390	1,149	1,149	861	574	-
95	35.0	Q(Btu/h)	16,058	16,058	12,044	8,029	-	5,460	15,000	15,000	11,250	7,500	-	5,100	13,942	13,942	10,456	6,971	-	4,740
			W	1,218	1,218	914	609	-	396	1,170	1,170	878	585	-	380	1,122	1,122	841	561	-
90	32.2	Q(Btu/h)	16,556	16,556	12,417	8,278	-	5,629	15,560	15,560	11,670	7,780	-	5,290	14,440	14,440	10,830	7,220	-	4,910
			W	1,175	1,175	882	588	-	382	1,122	1,122	841	561	-	364	1,079	1,079	809	540	-
85	29.4	Q(Btu/h)	17,178	17,178	12,884	8,589	-	5,841	16,183	16,183	12,137	8,091	-	5,502	15,062	15,062	11,297	7,531	-	5,121
			W	1,133	1,133	849	566	-	368	1,079	1,079	809	540	-	351	1,042	1,042	781	521	-
80	26.7	Q(Btu/h)	17,676	17,676	13,257	8,838	-	6,010	16,680	16,680	12,510	8,340	-	5,671	15,685	15,685	11,763	7,842	-	5,333
			W	1,090	1,090	817	545	-	354	1,031	1,031	773	516	-	335	999	999	749	500	-
75	23.9	Q(Btu/h)	18,299	18,299	13,724	9,149	-	6,222	17,178	17,178	12,884	8,589	-	5,841	16,245	16,245	12,184	8,122	-	5,523
			W	1,042	1,042	781	521	-	338	983	983	737	492	-	319	961	961	720	480	-
70	21.1	Q(Btu/h)	18,734	18,734	14,051	9,367	-	6,370	17,552	17,552	13,164	8,776	-	5,968	16,805	16,805	12,604	8,402	-	5,714
			W	988	988	741	494	-	321	940	940	705	470	-	305	903	903	677	451	-
67	19.4	Q(Btu/h)	18,921	18,921	14,191	9,461	-	6,433	17,925	17,925	13,444	8,963	-	6,095	17,178	17,178	12,884	8,589	-	5,841
			W	940	940	705	470	-	305	903	903	677	451	-	293	855	855	641	427	-

* It may not reach the above capacities in low ambient temperatures.

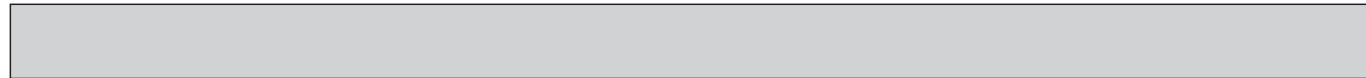
**MFZ-KX15NL
SUZ-AA15NLHZ**
2) HEATING

Rated

Q(Btu/h): 17,000
W: 1,270

Indoor D.B. Outdoor W.B. (°F) (°C)			77°F / 25.0°C						68°F / 20.0°C						59°F / 15.0°C					
			Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min
65	18.3	Q(Btu/h)	22,990	16,310	12,232	-	-	10,016	23,750	17,000	12,750	-	-	10,440	24,510	17,107	12,830	-	-	10,505
			W	1,364	1,484	1,113	-	-	494	1,335	1,438	1,079	-	-	479	1,307	1,346	1,010	-	-
60	15.6	Q(Btu/h)	22,040	16,306	12,229	-	-	9,413	22,800	17,000	12,750	-	-	9,814	23,560	17,417	13,063	-	-	10,054
			W	1,361	1,442	1,082	-	-	499	1,332	1,394	1,045	-	-	482	1,303	1,311	983	-	-
55	12.8	Q(Btu/h)	21,090	16,290	12,217	-	-	8,803	21,850	17,000	12,750	-	-	9,187	22,610	17,780	13,335	-	-	9,609
			W	1,377	1,399	1,049	-	-	502	1,347	1,348	1,011	-	-	484	1,317	1,281	961	-	-
50	10.0	Q(Btu/h)	20,140	16,260	12,195	-	-	8,188	20,805	17,000	12,750	-	-	8,561	21,565	18,128	13,596	-	-	9,129
			W	1,413	1,354	1,016	-	-	503	1,381	1,302	976	-	-	484	1,349	1,256	942	-	-
45	7.2	Q(Btu/h)	16,745	15,978	11,983	7,989	-	7,568	17,425	16,753	12,565	8,376	-	7,935	18,105	18,267	13,700	9,133	-	8,652
			W	1,466	1,309	981	654	-	503	1,433	1,254	941	627	-	482	1,399	1,229	922	615	-
40	4.4	Q(Btu/h)	16,320	15,327	11,495	7,664	-	6,943	17,000	16,135	12,101	8,068	-	7,309	17,680	18,382	13,786	9,191	-	8,326
			W	1,540	1,261	946	631	-	501	1,503	1,205	904	603	-	479	1,467	1,214	911	607	-
35	1.7	Q(Btu/h)	16,320	14,660	10,995	7,330	-	6,313	17,000	15,518	11,638	7,759	-	6,682	17,680	18,044	13,533	9,022	-	7,771
			W	1,669	1,213	910	607	-	498	1,592	1,155	867	578	-	474	1,490	1,192	894	596	-
30	-1.1	Q(Btu/h)	16,320	13,804	10,353	6,902	-	5,680	17,000	14,718	11,038	7,359	-	6,056	17,680	17,079	12,809	8,539	-	7,028
			W	1,769	1,164	873	582	-	493	1,700	1,105	828	552	-	468	1,607	1,145	859	572	-
25	-3.9	Q(Btu/h)	16,320	12,676	9,507	6,338	-	5,045	17,000	13,645	10,233	6,822	-	5,430	17,680	16,610	12,458	8,305	-	6,610
			W	1,894	1,113	835	556	-	486	1,825	1,053	789	526	-	460	1,734	1,129	846	564	-
20	-6.7	Q(Btu/h)	16,320	11,534	8,650	5,767	-	4,407	17,000	12,571	9,429	6,286	-	4,804	17,680	15,703	11,778	7,852	-	6,001
			W	2,040	1,061	796	531	-	478	1,970	999	750	500	-	450	1,876	1,082	811	541	-
15	-9.4	Q(Btu/h)	16,320	10,376	7,782	5,188	-	3,770	17,000	11,498	8,624	5,749	-	4,178	17,680	14,709	11,032	7,355	-	5,344
			W	2,204	1,009	757	504	-	469	2,132	945	709	473	-	439	2,036	1,041	781	521	-
10	-12.2	Q(Btu/h)	16,320	9,201	6,901	4,601	-	3,135	17,000	10,425	7,819	5,213	-	3,551	17,680	13,718	10,288	6,859	-	4,673
			W	2,390	955	717	478	-	458	2,313	890	667	445	-	427	2,212	989	742	494	-
5	-15.0	Q(Btu/h)	16,320	8,006	6,005	4,003	-	2,504	17,000	9,352	7,014	4,676	-	2,925	17,680	12,429	9,322	6,215	-	3,888
			W	2,453	902	676	451	-	446	2,376	834	625	417	-	412	2,274	930	697	465	-
0	-17.8	Q(Btu/h)	12,474	6,787	5,090	3,394	-	1,885	15,138	8,279	6,209	4,139	-	2,299	13,433	10,299	7,724	5,149	-	2,860
			W	2,209	848	636	424	-	433	2,116	776	582	388	-	396	2,024	833	625	416	-
-4	-20.0	Q(Btu/h)	10,596	5,789	4,342	2,894	1,447	1,403	13,648	7,420	5,565	3,710	1,855	1,798	11,411	10,658	7,993	5,329	2,664	2,583
			W	2,104	806	604	403	201	422	2,004	729	547	365	182	382	1,905	783	587	391	196
-13	-25.0	Q(Btu/h)	6,373	3,577	2,683	1,789	894	298	10,296	5,488	4,116	2,744	1,372	671	6,863	8,378	6,284	4,189	2,095	1,143
			W	2,003	713	535	356	178	347	1,864	622	466	311	155	347	1,724	760	570	380	190

* Above data is for heating operation without any frost.



**MFZ-KX18NL
SUZ-AA18NLHZ
1) COOLING**

Rated
Q(Btu/h): 18,000
W: 1,450

Indoor W.B. Outdoor D.B. (°F) (°C)			71°F / 21.7°C						67°F / 19.4°C						63°F / 17.2°C					
			Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min
115	46.1	Q(Btu/h)	16,432	16,432	12,324	8,216	-	4,473	15,386	15,386	11,539	7,693	-	4,188	14,041	14,041	10,531	7,021	-	3,822
			W	1,629	1,629	1,222	814	-	427	1,589	1,589	1,192	795	-	416	1,523	1,523	1,142	761	-
110	43.3	Q(Btu/h)	17,178	17,178	12,884	8,589	-	4,676	15,983	15,983	11,988	7,992	-	4,351	14,639	14,639	10,979	7,320	-	3,985
			W	1,602	1,602	1,202	801	-	420	1,563	1,563	1,172	781	-	409	1,490	1,490	1,117	745	-
105	40.6	Q(Btu/h)	17,925	17,925	13,444	8,963	-	4,880	16,581	16,581	12,436	8,290	-	4,514	15,386	15,386	11,539	7,693	-	4,188
			W	1,582	1,582	1,187	791	-	415	1,523	1,523	1,142	761	-	399	1,457	1,457	1,092	728	-
100	37.8	Q(Btu/h)	18,523	18,523	13,892	9,261	-	5,042	17,328	17,328	12,996	8,664	-	4,717	15,983	15,983	11,988	7,992	-	4,351
			W	1,536	1,536	1,152	768	-	403	1,490	1,490	1,117	745	-	390	1,424	1,424	1,068	712	-
95	35.0	Q(Btu/h)	19,270	19,270	14,452	9,635	-	5,246	18,000	18,000	13,500	9,000	-	4,900	16,730	16,730	12,548	8,365	-	4,554
			W	1,510	1,510	1,132	755	-	396	1,450	1,450	1,088	725	-	380	1,390	1,390	1,043	695	-
90	32.2	Q(Btu/h)	19,867	19,867	14,900	9,934	-	5,408	18,672	18,672	14,004	9,336	-	5,083	17,328	17,328	12,996	8,664	-	4,717
			W	1,457	1,457	1,092	728	-	382	1,390	1,390	1,043	695	-	364	1,337	1,337	1,003	669	-
85	29.4	Q(Btu/h)	20,614	20,614	15,461	10,307	-	5,612	19,419	19,419	14,564	9,710	-	5,286	18,075	18,075	13,556	9,037	-	4,920
			W	1,404	1,404	1,053	702	-	368	1,337	1,337	1,003	669	-	351	1,291	1,291	968	646	-
80	26.7	Q(Btu/h)	21,212	21,212	15,909	10,606	-	5,774	20,017	20,017	15,012	10,008	-	5,449	18,822	18,822	14,116	9,411	-	5,124
			W	1,351	1,351	1,013	675	-	354	1,278	1,278	958	639	-	335	1,238	1,238	929	619	-
75	23.9	Q(Btu/h)	21,959	21,959	16,469	10,979	-	5,978	20,614	20,614	15,461	10,307	-	5,612	19,494	19,494	14,620	9,747	-	5,307
			W	1,291	1,291	968	646	-	338	1,218	1,218	914	609	-	319	1,190	1,190	893	595	-
70	21.1	Q(Btu/h)	22,481	22,481	16,861	11,241	-	6,120	21,062	21,062	15,797	10,531	-	5,734	20,166	20,166	15,124	10,083	-	5,490
			W	1,225	1,225	919	612	-	321	1,165	1,165	874	583	-	305	1,119	1,119	839	559	-
67	19.4	Q(Btu/h)	22,705	22,705	17,029	11,353	-	6,181	21,510	21,510	16,133	10,755	-	5,856	20,614	20,614	15,461	10,307	-	5,612
			W	1,165	1,165	874	583	-	305	1,119	1,119	839	559	-	293	1,059	1,059	795	530	-

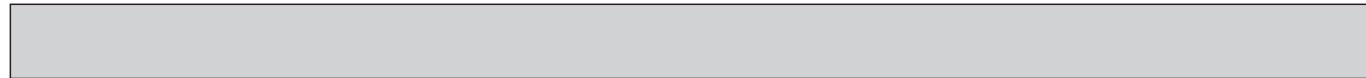
* It may not reach the above capacities in low ambient temperatures.

**MFZ-KX18NL
SUZ-AA18NLHZ**
2) HEATING

Rated
Q(Btu/h): 20,000
W: 1,690

Indoor D.B. Outdoor W.B. (°F) (°C)			77°F / 25.0°C						68°F / 20.0°C						59°F / 15.0°C						
			Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	
65	18.3	Q(Btu/h)	27,225	19,188	14,391	-	-	10,016	28,125	20,000	15,000	-	-	10,440	29,025	20,126	15,094	-	-	10,505	
			W	1,919	1,975	1,481	-	-	494	1,878	1,914	1,435	-	-	479	1,838	1,792	1,344	-	-	448
60	15.6	Q(Btu/h)	26,100	19,183	14,387	9,592	-	9,413	27,000	20,000	15,000	10,000	-	-	9,814	27,900	20,491	15,368	10,245	-	10,054
			W	1,915	1,919	1,439	960	-	499	1,874	1,855	1,391	927	-	482	1,833	1,745	1,309	872	-	453
55	12.8	Q(Btu/h)	24,975	19,164	14,373	9,582	-	8,803	25,875	20,000	15,000	10,000	-	-	9,187	26,775	20,918	15,688	10,459	-	9,609
			W	1,938	1,862	1,396	931	-	502	1,895	1,794	1,346	897	-	484	1,853	1,705	1,278	852	-	459
50	10.0	Q(Btu/h)	23,850	19,129	14,347	9,564	-	8,188	24,638	20,000	15,000	10,000	-	-	8,561	25,538	21,327	15,995	10,663	-	9,129
			W	1,987	1,802	1,352	901	-	503	1,942	1,732	1,299	866	-	484	1,898	1,671	1,253	836	-	467
45	7.2	Q(Btu/h)	19,700	18,797	14,098	9,399	-	7,568	20,500	19,709	14,782	9,855	-	-	7,935	21,300	21,490	16,118	10,745	-	8,652
			W	2,063	1,741	1,306	871	-	503	2,016	1,669	1,252	834	-	482	1,969	1,636	1,227	818	-	473
40	4.4	Q(Btu/h)	19,200	18,032	13,524	9,016	-	6,943	20,000	18,983	14,237	9,491	-	-	7,309	20,800	21,626	16,219	10,813	-	8,326
			W	2,166	1,679	1,259	839	-	501	2,115	1,604	1,203	802	-	479	2,064	1,615	1,212	808	-	483
35	1.7	Q(Btu/h)	19,200	17,247	12,935	8,624	-	6,313	20,000	18,256	13,692	9,128	-	-	6,682	20,800	21,229	15,922	10,614	-	7,771
			W	2,348	1,614	1,211	807	-	498	2,240	1,538	1,153	769	-	474	2,095	1,586	1,190	793	-	489
30	-1.1	Q(Btu/h)	19,200	16,240	12,180	8,120	-	5,680	20,000	17,315	12,986	8,657	-	-	6,056	20,800	20,092	15,069	10,046	-	7,028
			W	2,488	1,548	1,161	774	-	493	2,391	1,470	1,102	735	-	468	2,261	1,523	1,143	762	-	485
25	-3.9	Q(Btu/h)	19,200	14,913	11,185	7,457	-	5,045	20,000	16,052	12,039	8,026	-	-	5,430	20,800	19,542	14,656	9,771	-	6,610
			W	2,664	1,481	1,111	741	-	486	2,568	1,401	1,050	700	-	460	2,439	1,502	1,126	751	-	493
20	-6.7	Q(Btu/h)	19,200	13,569	10,177	6,785	-	4,407	20,000	14,790	11,092	7,395	-	-	4,804	20,800	18,475	13,856	9,237	-	6,001
			W	2,869	1,412	1,059	706	-	478	2,771	1,330	997	665	-	450	2,639	1,439	1,079	720	-	488
15	-9.4	Q(Btu/h)	19,200	12,207	9,155	6,104	-	3,770	20,000	13,527	10,145	6,764	-	-	4,178	20,800	17,305	12,979	8,653	-	5,344
			W	3,101	1,342	1,007	671	-	469	2,999	1,258	943	629	-	439	2,864	1,386	1,039	693	-	484
10	-12.2	Q(Btu/h)	19,200	10,825	8,119	5,413	-	3,135	20,000	12,265	9,199	6,132	-	-	3,551	20,800	16,138	12,104	8,069	-	4,673
			W	3,361	1,271	954	636	-	458	3,254	1,184	888	592	-	427	3,111	1,316	987	658	-	474
5	-15.0	Q(Btu/h)	19,200	9,419	7,064	4,710	-	2,504	20,000	11,002	8,252	5,501	-	-	2,925	20,800	14,623	10,967	7,311	-	3,888
			W	3,330	1,164	873	582	-	433	3,326	1,076	807	538	-	400	3,087	1,200	900	600	-	446
0	-17.8	Q(Btu/h)	14,771	7,985	5,989	3,992	1,996	1,885	17,809	9,740	7,305	4,870	2,435	-	2,299	15,908	12,116	9,087	6,058	3,029	2,860
			W	3,286	1,129	846	564	282	433	3,148	1,033	775	516	258	-	396	3,011	1,108	831	554	277
-4	-20.0	Q(Btu/h)	12,548	6,811	5,108	3,405	1,703	1,403	16,057	8,730	6,547	4,365	2,182	1,798	13,513	12,538	9,404	6,269	3,135	2,583	
			W	3,130	1,072	804	536	268	422	2,982	971	728	485	243	-	382	2,833	1,041	781	521	260
-13	-25.0	Q(Btu/h)	7,546	4,208	3,156	2,104	1,052	298	12,113	6,457	4,843	3,228	1,614	-	671	8,127	9,857	7,393	4,928	2,464	1,143
			W	2,980	949	711	474	237	347	2,773	827	620	414	207	-	347	2,565	1,011	758	505	253

* Above data is for heating operation without any frost.



**MSZ-EX09NL
SUZ-AA09NLHZ
1) COOLING**

Rated
Q(Btu/h): 9,000
W: 710

		71°F / 21.7°C						67°F / 19.4°C						63°F / 17.2°C						
Indoor W.B.	Outdoor D.B.	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	
115	46.1	Q(Btu/h)	8,216	8,216	6,162	-	-	4,290	7,693	7,693	5,770	-	-	4,017	7,021	7,021	5,266	-	-	3,666
			W	798	798	598	-	-	416	778	778	584	-	-	405	746	746	559	-	-
110	43.3	Q(Btu/h)	8,589	8,589	6,442	-	-	4,485	7,992	7,992	5,994	-	-	4,173	7,320	7,320	5,490	-	-	3,822
			W	785	785	588	-	-	409	765	765	574	-	-	399	729	729	547	-	-
105	40.6	Q(Btu/h)	8,963	8,963	6,722	-	-	4,680	8,290	8,290	6,218	-	-	4,329	7,693	7,693	5,770	-	-	4,017
			W	775	775	581	-	-	404	746	746	559	-	-	389	713	713	535	-	-
100	37.8	Q(Btu/h)	9,261	9,261	6,946	-	-	4,837	8,664	8,664	6,498	-	-	4,524	7,992	7,992	5,994	-	-	4,173
			W	752	752	564	-	-	392	729	729	547	-	-	380	697	697	523	-	-
95	35.0	Q(Btu/h)	9,635	9,635	7,226	-	-	5,032	9,000	9,000	6,750	-	-	4,700	8,365	8,365	6,274	-	-	4,368
			W	739	739	554	-	-	385	710	710	533	-	-	370	681	681	511	-	-
90	32.2	Q(Btu/h)	9,934	9,934	7,450	-	-	5,188	9,336	9,336	7,002	-	-	4,876	8,664	8,664	6,498	-	-	4,524
			W	713	713	535	-	-	372	681	681	511	-	-	355	655	655	491	-	-
85	29.4	Q(Btu/h)	10,307	10,307	7,730	-	-	5,383	9,710	9,710	7,282	-	-	5,071	9,037	9,037	6,778	-	-	4,720
			W	687	687	515	-	-	358	655	655	491	-	-	341	632	632	474	-	-
80	26.7	Q(Btu/h)	10,606	10,606	7,954	-	-	5,539	10,008	10,008	7,506	-	-	5,227	9,411	9,411	7,058	-	-	4,915
			W	661	661	496	-	-	345	626	626	469	-	-	326	606	606	455	-	-
75	23.9	Q(Btu/h)	10,979	10,979	8,234	-	-	5,734	10,307	10,307	7,730	-	-	5,383	9,747	9,747	7,310	-	-	5,090
			W	632	632	474	-	-	329	597	597	447	-	-	311	583	583	437	-	-
70	21.1	Q(Btu/h)	11,241	11,241	8,430	-	-	5,870	10,531	10,531	7,898	-	-	5,500	10,083	10,083	7,562	-	-	5,266
			W	600	600	450	-	-	313	571	571	428	-	-	297	548	548	411	-	-
67	19.4	Q(Btu/h)	11,353	11,353	8,515	-	-	5,929	10,755	10,755	8,066	-	-	5,617	10,307	10,307	7,730	-	-	5,383
			W	571	571	428	-	-	297	548	548	411	-	-	286	519	519	389	-	-

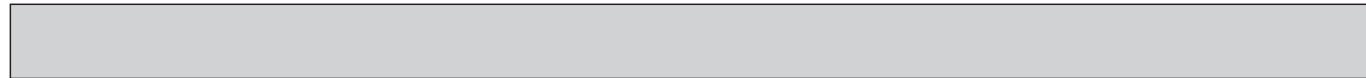
* It may not reach the above capacities in low ambient temperatures.

**MSZ-EX09NL
SUZ-AA09NLHZ**
2) HEATING

Rated
Q(Btu/h): 12,000
W: 900

Indoor D.B. Outdoor W.B. (°F) (°C)			77°F / 25.0°C						68°F / 20.0°C						59°F / 15.0°C						
	Max	Rated	75%	50%	25%	Min		Max	Rated	75%	50%	25%	Min		Max	Rated	75%	50%	25%	Min	
65	18.3	Q(Btu/h)	18,150	11,513	8,635	-	-	9,778	18,750	12,000	9,000	-	-	10,191	19,350	12,075	9,057	-	-	10,255	
			W	1,055	1,052	789	-	-	484	1,033	1,019	764	-	-	469	1,010	954	716	-	-	439
60	15.6	Q(Btu/h)	17,400	11,510	8,632	-	-	9,189	18,000	12,000	9,000	-	-	9,580	18,600	12,294	9,221	-	-	9,815	
			W	1,053	1,022	766	-	-	488	1,030	988	741	-	-	472	1,008	929	697	-	-	444
55	12.8	Q(Btu/h)	16,650	11,498	8,624	-	-	8,594	17,250	12,000	9,000	-	-	8,969	17,850	12,551	9,413	-	-	9,380	
			W	1,065	991	744	-	-	491	1,042	955	717	-	-	474	1,019	908	681	-	-	450
50	10.0	Q(Btu/h)	15,900	11,477	8,608	-	-	7,993	16,425	12,000	9,000	-	-	8,357	17,025	12,796	9,597	-	-	8,912	
			W	1,092	960	720	-	-	493	1,068	922	692	-	-	474	1,043	890	667	-	-	457
45	7.2	Q(Btu/h)	11,820	11,278	8,459	-	-	7,388	12,300	11,826	8,869	-	-	7,746	12,780	12,894	9,671	-	-	8,446	
			W	1,134	927	696	-	-	493	1,108	889	667	-	-	472	1,082	871	653	-	-	463
40	4.4	Q(Btu/h)	11,520	10,819	8,114	-	-	6,777	12,000	11,390	8,542	-	-	7,135	12,480	12,975	9,732	-	-	8,128	
			W	1,191	894	670	-	-	491	1,163	854	641	-	-	469	1,135	860	645	-	-	472
35	1.7	Q(Btu/h)	11,520	10,348	7,761	-	-	6,163	12,000	10,954	8,215	-	-	6,523	12,480	12,737	9,553	-	-	7,586	
			W	1,291	860	645	-	-	488	1,231	819	614	-	-	464	1,152	845	634	-	-	479
30	-1.1	Q(Btu/h)	11,520	9,744	7,308	-	-	5,545	12,000	10,389	7,792	-	-	5,912	12,480	12,055	9,042	-	-	6,860	
			W	1,368	825	618	-	-	483	1,314	783	587	-	-	458	1,243	811	608	-	-	475
25	-3.9	Q(Btu/h)	11,520	8,948	6,711	-	-	4,925	12,000	9,631	7,224	-	-	5,301	12,480	11,725	8,794	-	-	6,453	
			W	1,465	789	592	-	-	476	1,412	746	559	-	-	450	1,341	800	600	-	-	483
20	-6.7	Q(Btu/h)	11,520	8,142	6,106	-	-	4,302	12,000	8,874	6,655	-	-	4,689	12,480	11,085	8,314	-	-	5,858	
			W	1,577	752	564	-	-	468	1,523	708	531	-	-	441	1,451	766	575	-	-	477
15	-9.4	Q(Btu/h)	11,520	7,324	5,493	-	-	3,680	12,000	8,116	6,087	-	-	4,078	12,480	10,383	7,787	-	-	5,217	
			W	1,580	715	536	-	-	459	1,528	670	502	-	-	430	1,459	738	553	-	-	474
10	-12.2	Q(Btu/h)	11,520	6,495	4,871	3,248	-	3,060	12,000	7,359	5,519	3,679	-	3,467	12,480	9,683	7,262	4,842	-	4,562	
			W	1,584	677	508	339	-	448	1,534	631	473	315	-	418	1,466	701	526	350	-	464
5	-15.0	Q(Btu/h)	11,520	5,652	4,239	2,826	-	2,445	12,000	6,601	4,951	3,301	-	2,856	12,480	8,774	6,580	4,387	-	3,795	
			W	1,495	620	465	310	-	424	1,493	573	430	286	-	392	1,386	639	479	320	-	437
0	-17.8	Q(Btu/h)	9,848	4,791	3,593	2,395	-	1,840	10,686	5,844	4,383	2,922	-	2,244	10,605	7,270	5,452	3,635	-	2,792	
			W	1,475	601	451	301	-	424	1,413	550	412	275	-	388	1,352	590	443	295	-	416
-4	-20.0	Q(Btu/h)	8,365	4,086	3,065	2,043	-	1,369	9,634	5,238	3,928	2,619	-	1,755	9,009	7,523	5,642	3,761	-	2,521	
			W	1,405	571	428	286	-	414	1,339	517	388	258	-	374	1,272	555	416	277	-	402
-13	-25.0	Q(Btu/h)	5,031	2,525	1,894	1,263	631	291	7,268	3,874	2,906	1,937	969	-	655	5,418	5,914	4,436	2,957	1,479	1,116
			W	1,338	505	379	253	126	340	1,245	440	330	220	110	-	340	1,151	538	404	269	135

* Above data is for heating operation without any frost.



**MSZ-EX12NL
SUZ-AA12NLHZ
1) COOLING**

Rated
Q(Btu/h): 12,000
W: 850

Indoor W.B. Outdoor D.B. (°F) (°C)			71°F / 21.7°C						67°F / 19.4°C						63°F / 17.2°C					
			Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min
115	46.1	Q(Btu/h)	10,954	10,954	8,216	5,477	-	4,290	10,257	10,257	7,693	5,129	-	4,017	9,361	9,361	7,021	4,680	-	3,666
		W	955	955	716	477	-	416	932	932	699	466	-	405	893	893	670	446	-	389
110	43.3	Q(Btu/h)	11,452	11,452	8,589	5,726	-	4,485	10,656	10,656	7,992	5,328	-	4,173	9,759	9,759	7,320	4,880	-	3,822
		W	939	939	704	470	-	409	916	916	687	458	-	399	873	873	655	437	-	380
105	40.6	Q(Btu/h)	11,950	11,950	8,963	5,975	-	4,680	11,054	11,054	8,290	5,527	-	4,329	10,257	10,257	7,693	5,129	-	4,017
		W	928	928	696	464	-	404	893	893	670	446	-	389	854	854	640	427	-	372
100	37.8	Q(Btu/h)	12,349	12,349	9,261	6,174	-	4,837	11,552	11,552	8,664	5,776	-	4,524	10,656	10,656	7,992	5,328	-	4,173
		W	900	900	675	450	-	392	873	873	655	437	-	380	834	834	626	417	-	363
95	35.0	Q(Btu/h)	12,846	12,846	9,635	6,423	-	5,032	12,000	12,000	9,000	6,000	-	4,700	11,154	11,154	8,365	5,577	-	4,368
		W	885	885	664	442	-	385	850	850	638	425	-	370	815	815	611	408	-	355
90	32.2	Q(Btu/h)	13,245	13,245	9,934	6,622	-	5,188	12,448	12,448	9,336	6,224	-	4,876	11,552	11,552	8,664	5,776	-	4,524
		W	854	854	640	427	-	372	815	815	611	408	-	355	784	784	588	392	-	341
85	29.4	Q(Btu/h)	13,743	13,743	10,307	6,871	-	5,383	12,946	12,946	9,710	6,473	-	5,071	12,050	12,050	9,037	6,025	-	4,720
		W	823	823	617	411	-	358	784	784	588	392	-	341	757	757	568	378	-	329
80	26.7	Q(Btu/h)	14,141	14,141	10,606	7,071	-	5,539	13,344	13,344	10,008	6,672	-	5,227	12,548	12,548	9,411	6,274	-	4,915
		W	792	792	594	396	-	345	749	749	562	375	-	326	726	726	544	363	-	316
75	23.9	Q(Btu/h)	14,639	14,639	10,979	7,320	-	5,734	13,743	13,743	10,307	6,871	-	5,383	12,996	12,996	9,747	6,498	-	5,090
		W	757	757	568	378	-	329	714	714	536	357	-	311	698	698	523	349	-	304
70	21.1	Q(Btu/h)	14,988	14,988	11,241	7,494	-	5,870	14,041	14,041	10,531	7,021	-	5,500	13,444	13,444	10,083	6,722	-	5,266
		W	718	718	539	359	-	313	683	683	512	342	-	297	656	656	492	328	-	286
67	19.4	Q(Btu/h)	15,137	15,137	11,353	7,568	-	5,929	14,340	14,340	10,755	7,170	-	5,617	13,743	13,743	10,307	6,871	-	5,383
		W	683	683	512	342	-	297	656	656	492	328	-	286	621	621	466	311	-	270

* It may not reach the above capacities in low ambient temperatures.

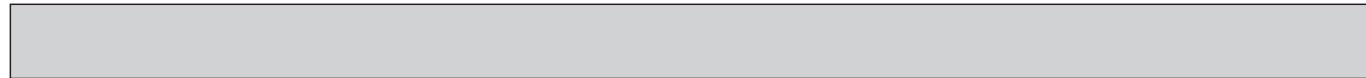
**MSZ-EX12NL
SUZ-AA12NLHZ**
2) HEATING

Rated

Q(Btu/h): 15,000
W: 1,150

Indoor D.B. Outdoor W.B. (°F) (°C)			77°F / 25.0°C						68°F / 20.0°C						59°F / 15.0°C						
			Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	
65	18.3	Q(Btu/h)	21,780	14,391	10,793	-	-	9,778	22,500	15,000	11,250	-	-	10,191	23,220	15,094	11,321	-	-	10,255	
			W	1,355	1,344	1,008	-	-	484	1,326	1,302	977	-	-	469	1,298	1,219	914	-	-	439
60	15.6	Q(Btu/h)	20,880	14,387	10,791	-	-	9,189	21,600	15,000	11,250	-	-	9,580	22,320	15,368	11,526	-	-	9,815	
			W	1,352	1,306	979	-	-	488	1,323	1,262	947	-	-	472	1,294	1,187	890	-	-	444
55	12.8	Q(Btu/h)	19,980	14,373	10,780	-	-	8,594	20,700	15,000	11,250	-	-	8,969	21,420	15,688	11,766	-	-	9,380	
			W	1,368	1,267	950	-	-	491	1,338	1,221	916	-	-	474	1,308	1,160	870	-	-	450
50	10.0	Q(Btu/h)	19,080	14,347	10,760	-	-	7,993	19,710	15,000	11,250	-	-	8,357	20,430	15,995	11,996	-	-	8,912	
			W	1,403	1,226	920	-	-	493	1,372	1,179	884	-	-	474	1,340	1,137	853	-	-	457
45	7.2	Q(Btu/h)	14,775	14,098	10,574	-	-	7,388	15,375	14,782	11,086	-	-	7,746	15,975	16,118	12,088	-	-	8,446	
			W	1,457	1,185	889	-	-	493	1,423	1,136	852	-	-	472	1,390	1,113	835	-	-	463
40	4.4	Q(Btu/h)	14,400	13,524	10,143	-	-	6,777	15,000	14,237	10,678	-	-	7,135	15,600	16,219	12,165	-	-	8,128	
			W	1,529	1,142	857	-	-	491	1,493	1,091	819	-	-	469	1,457	1,099	824	-	-	472
35	1.7	Q(Btu/h)	14,400	12,935	9,702	6,468	-	6,163	15,000	13,692	10,269	6,846	-	6,523	15,600	15,922	11,941	7,961	-	7,586	
			W	1,658	1,098	824	549	-	488	1,582	1,046	785	523	-	464	1,480	1,079	809	540	-	479
30	-1.1	Q(Btu/h)	14,400	12,180	9,135	6,090	-	5,545	15,000	12,986	9,740	6,493	-	5,912	15,600	15,069	11,302	7,535	-	6,860	
			W	1,757	1,054	790	527	-	483	1,688	1,000	750	500	-	458	1,596	1,037	777	518	-	475
25	-3.9	Q(Btu/h)	14,400	11,185	8,389	5,592	-	4,925	15,000	12,039	9,029	6,020	-	5,301	15,600	14,656	10,992	7,328	-	6,453	
			W	1,881	1,008	756	504	-	476	1,813	953	715	477	-	450	1,723	1,022	767	511	-	483
20	-6.7	Q(Btu/h)	14,400	10,177	7,633	5,088	-	4,302	15,000	11,092	8,319	5,546	-	4,689	15,600	13,856	10,392	6,928	-	5,858	
			W	2,026	961	721	481	-	468	1,956	905	679	452	-	441	1,864	979	735	490	-	477
15	-9.4	Q(Btu/h)	14,400	9,155	6,867	4,578	-	3,680	15,000	10,145	7,609	5,073	-	4,078	15,600	12,979	9,734	6,489	-	5,217	
			W	2,190	913	685	457	-	459	2,118	856	642	428	-	430	2,022	943	707	471	-	474
10	-12.2	Q(Btu/h)	14,400	8,119	6,089	4,059	-	3,060	15,000	9,199	6,899	4,599	-	3,467	15,600	12,104	9,078	6,052	-	4,562	
			W	2,239	865	649	433	-	448	2,167	806	604	403	-	418	2,072	895	672	448	-	464
5	-15.0	Q(Btu/h)	14,400	7,064	5,298	3,532	-	2,445	15,000	8,252	6,189	4,126	-	2,856	15,600	10,967	8,225	5,484	-	3,795	
			W	2,152	792	594	396	-	424	2,150	732	549	366	-	392	1,996	817	613	408	-	437
0	-17.8	Q(Btu/h)	11,817	5,989	4,491	2,994	-	1,840	13,357	7,305	5,479	3,652	-	2,244	12,726	9,087	6,815	4,544	-	2,792	
			W	2,124	768	576	384	-	424	2,035	703	527	351	-	388	1,946	754	566	377	-	416
-4	-20.0	Q(Btu/h)	10,039	5,108	3,831	2,554	-	1,369	12,043	6,547	4,910	3,274	-	1,755	10,811	9,404	7,053	4,702	-	2,521	
			W	2,023	730	547	365	-	414	1,927	660	495	330	-	374	1,831	709	531	354	-	402
-13	-25.0	Q(Btu/h)	6,037	3,156	2,367	1,578	789	291	9,085	4,843	3,632	2,421	1,211	-	655	6,502	7,393	5,545	3,696	1,848	1,116
			W	1,926	646	484	323	161	340	1,792	563	422	281	141	-	340	1,658	688	516	344	172

* Above data is for heating operation without any frost.



**MSZ-EX15NL
SUZ-AA15NLHZ
1) COOLING**

Rated

Q(Btu/h): 15,000
W: 1,260

Indoor W.B. Outdoor D.B. (°F) (°C)			71°F / 21.7°C						67°F / 19.4°C						63°F / 17.2°C					
			Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min
115	46.1	Q(Btu/h)	13,693	13,693	10,270	6,846	-	4,473	12,822	12,822	9,616	6,411	-	4,188	11,701	11,701	8,776	5,851	-	3,822
			W	1,415	1,415	1,062	708	-	427	1,381	1,381	1,036	690	-	416	1,323	1,323	992	662	-
110	43.3	Q(Btu/h)	14,315	14,315	10,737	7,158	-	4,676	13,320	13,320	9,990	6,660	-	4,351	12,199	12,199	9,149	6,100	-	3,985
			W	1,392	1,392	1,044	696	-	420	1,358	1,358	1,018	679	-	409	1,295	1,295	971	647	-
105	40.6	Q(Btu/h)	14,938	14,938	11,203	7,469	-	4,880	13,817	13,817	10,363	6,909	-	4,514	12,822	12,822	9,616	6,411	-	4,188
			W	1,375	1,375	1,031	688	-	415	1,323	1,323	992	662	-	399	1,266	1,266	949	633	-
100	37.8	Q(Btu/h)	15,436	15,436	11,577	7,718	-	5,042	14,440	14,440	10,830	7,220	-	4,717	13,320	13,320	9,990	6,660	-	4,351
			W	1,335	1,335	1,001	667	-	403	1,295	1,295	971	647	-	390	1,237	1,237	928	618	-
95	35.0	Q(Btu/h)	16,058	16,058	12,044	8,029	-	5,246	15,000	15,000	11,250	7,500	-	4,900	13,942	13,942	10,456	6,971	-	4,554
			W	1,312	1,312	984	656	-	396	1,260	1,260	945	630	-	380	1,208	1,208	906	604	-
90	32.2	Q(Btu/h)	16,556	16,556	12,417	8,278	-	5,408	15,560	15,560	11,670	7,780	-	5,083	14,440	14,440	10,830	7,220	-	4,717
			W	1,266	1,266	949	633	-	382	1,208	1,208	906	604	-	364	1,162	1,162	872	581	-
85	29.4	Q(Btu/h)	17,178	17,178	12,884	8,589	-	5,612	16,183	16,183	12,137	8,091	-	5,286	15,062	15,062	11,297	7,531	-	4,920
			W	1,220	1,220	915	610	-	368	1,162	1,162	872	581	-	351	1,122	1,122	841	561	-
80	26.7	Q(Btu/h)	17,676	17,676	13,257	8,838	-	5,774	16,680	16,680	12,510	8,340	-	5,449	15,685	15,685	11,763	7,842	-	5,124
			W	1,174	1,174	880	587	-	354	1,110	1,110	833	555	-	335	1,076	1,076	807	538	-
75	23.9	Q(Btu/h)	18,299	18,299	13,724	9,149	-	5,978	17,178	17,178	12,884	8,589	-	5,612	16,245	16,245	12,184	8,122	-	5,307
			W	1,122	1,122	841	561	-	338	1,059	1,059	794	529	-	319	1,034	1,034	776	517	-
70	21.1	Q(Btu/h)	18,734	18,734	14,051	9,367	-	6,120	17,552	17,552	13,164	8,776	-	5,734	16,805	16,805	12,604	8,402	-	5,490
			W	1,064	1,064	798	532	-	321	1,013	1,013	759	506	-	305	972	972	729	486	-
67	19.4	Q(Btu/h)	18,921	18,921	14,191	9,461	-	6,181	17,925	17,925	13,444	8,963	-	5,856	17,178	17,178	12,884	8,589	-	5,612
			W	1,013	1,013	759	506	-	305	972	972	729	486	-	293	921	921	690	460	-

* It may not reach the above capacities in low ambient temperatures.

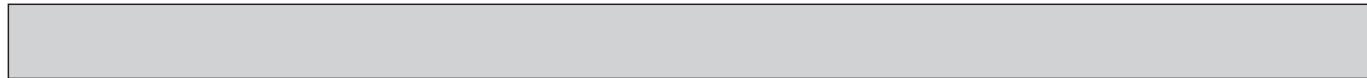
**MSZ-EX15NL
SUZ-AA15NLHZ**
2) HEATING

Rated

Q(Btu/h): 17,000
W: 1,330

Indoor D.B. Outdoor W.B. (°F) (°C)			77°F / 25.0°C						68°F / 20.0°C						59°F / 15.0°C					
			Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min
65	18.3	Q(Btu/h)	23,353	16,310	12,232	-	-	9,897	24,125	17,000	12,750	-	-	10,315	24,897	17,107	12,830	-	-	10,380
		W	1,482	1,554	1,165	-	-	484	1,451	1,506	1,130	-	-	469	1,420	1,410	1,057	-	-	439
60	15.6	Q(Btu/h)	22,388	16,306	12,229	-	-	9,301	23,160	17,000	12,750	-	-	9,697	23,932	17,417	13,063	-	-	9,935
		W	1,479	1,510	1,133	-	-	488	1,448	1,460	1,095	-	-	472	1,416	1,373	1,030	-	-	444
55	12.8	Q(Btu/h)	21,423	16,290	12,217	-	-	8,699	22,195	17,000	12,750	-	-	9,078	22,967	17,780	13,335	-	-	9,495
		W	1,497	1,465	1,099	-	-	491	1,464	1,412	1,059	-	-	474	1,431	1,342	1,006	-	-	450
50	10.0	Q(Btu/h)	20,458	16,260	12,195	8,130	-	8,091	21,134	17,000	12,750	8,500	-	8,459	21,906	18,128	13,596	9,064	-	9,020
		W	1,535	1,418	1,064	709	-	493	1,501	1,363	1,022	682	-	474	1,466	1,315	986	658	-	457
45	7.2	Q(Btu/h)	16,745	15,978	11,983	7,989	-	7,478	17,425	16,753	12,565	8,376	-	7,840	18,105	18,267	13,700	9,133	-	8,549
		W	1,594	1,370	1,028	685	-	493	1,557	1,313	985	657	-	472	1,521	1,287	965	644	-	463
40	4.4	Q(Btu/h)	16,320	15,327	11,495	7,664	-	6,860	17,000	16,135	12,101	8,068	-	7,222	17,680	18,382	13,786	9,191	-	8,227
		W	1,673	1,321	991	661	-	491	1,634	1,262	947	631	-	469	1,594	1,271	954	636	-	472
35	1.7	Q(Btu/h)	16,320	14,660	10,995	7,330	-	6,238	17,000	15,518	11,638	7,759	-	6,603	17,680	18,044	13,533	9,022	-	7,678
		W	1,814	1,270	953	635	-	488	1,730	1,210	908	605	-	464	1,619	1,248	936	624	-	479
30	-1.1	Q(Btu/h)	16,320	13,804	10,353	6,902	-	5,613	17,000	14,718	11,038	7,359	-	5,984	17,680	17,079	12,809	8,539	-	6,944
		W	1,922	1,219	914	609	-	483	1,847	1,157	868	578	-	458	1,746	1,199	899	599	-	475
25	-3.9	Q(Btu/h)	16,320	12,676	9,507	6,338	-	4,985	17,000	13,645	10,233	6,822	-	5,365	17,680	16,610	12,458	8,305	-	6,532
		W	2,058	1,166	874	583	-	476	1,984	1,102	827	551	-	450	1,884	1,182	886	591	-	483
20	-6.7	Q(Btu/h)	16,320	11,534	8,650	5,767	-	4,355	17,000	12,571	9,429	6,286	-	4,747	17,680	15,703	11,778	7,852	-	5,929
		W	2,216	1,111	834	556	-	468	2,140	1,047	785	523	-	441	2,039	1,133	849	566	-	477
15	-9.4	Q(Btu/h)	16,320	10,376	7,782	5,188	-	3,725	17,000	11,498	8,624	5,749	-	4,128	17,680	14,709	11,032	7,355	-	5,281
		W	2,396	1,056	792	528	-	459	2,317	990	742	495	-	430	2,212	1,091	818	545	-	474
10	-12.2	Q(Btu/h)	16,320	9,201	6,901	4,601	-	3,097	17,000	10,425	7,819	5,213	-	3,509	17,680	13,718	10,288	6,859	-	4,617
		W	2,597	1,001	750	500	-	448	2,514	932	699	466	-	418	2,403	1,036	777	518	-	464
5	-15.0	Q(Btu/h)	16,320	8,006	6,005	4,003	-	2,475	17,000	9,352	7,014	4,676	-	2,890	17,680	12,429	9,322	6,215	-	3,842
		W	2,665	944	708	472	-	437	2,582	873	655	436	-	404	2,471	974	730	487	-	450
0	-17.8	Q(Btu/h)	12,670	6,787	5,090	3,394	-	1,862	15,138	8,279	6,209	4,139	-	2,272	13,645	10,299	7,724	5,149	-	2,826
		W	2,400	888	666	444	-	424	2,300	813	610	406	-	388	2,199	872	654	436	-	416
-4	-20.0	Q(Btu/h)	10,764	5,789	4,342	2,894	1,447	1,386	13,648	7,420	5,565	3,710	1,855	1,777	11,592	10,658	7,993	5,329	2,664	2,552
		W	2,287	844	633	422	211	414	2,178	764	573	382	191	374	2,070	820	615	410	205	402
-13	-25.0	Q(Btu/h)	6,473	3,577	2,683	1,789	894	294	10,296	5,488	4,116	2,744	1,372	663	6,971	8,378	6,284	4,189	2,095	1,130
		W	2,177	747	560	373	187	340	2,025	651	488	325	163	340	1,874	795	597	398	199	410

* Above data is for heating operation without any frost.



**MSZ-EX18NL
SUZ-AA18NLHZ
1) COOLING**

Rated
Q(Btu/h): 16,400
W: 1,390

Indoor W.B.			71°F / 21.7°C						67°F / 19.4°C						63°F / 17.2°C					
Outdoor D.B. (°F)	Outdoor D.B. (°C)	Max Q(Btu/h)	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min
115	46.1	Q(Btu/h)	14,971	14,971	11,228	7,485	-	4,747	14,018	14,018	10,514	7,009	-	4,445	12,793	12,793	9,595	6,397	-	4,056
			W	1,561	1,561	1,171	781	-	427	1,523	1,523	1,142	762	-	416	1,460	1,460	1,095	730	-
110	43.3	Q(Btu/h)	15,651	15,651	11,739	7,826	-	4,963	14,563	14,563	10,922	7,281	-	4,617	13,338	13,338	10,003	6,669	-	4,229
			W	1,536	1,536	1,152	768	-	420	1,498	1,498	1,123	749	-	409	1,428	1,428	1,071	714	-
105	40.6	Q(Btu/h)	16,332	16,332	12,249	8,166	-	5,178	15,107	15,107	11,330	7,554	-	4,790	14,018	14,018	10,514	7,009	-	4,445
			W	1,517	1,517	1,138	758	-	415	1,460	1,460	1,095	730	-	399	1,396	1,396	1,047	698	-
100	37.8	Q(Btu/h)	16,876	16,876	12,657	8,438	-	5,351	15,788	15,788	11,841	7,894	-	5,006	14,563	14,563	10,922	7,281	-	4,617
			W	1,473	1,473	1,104	736	-	403	1,428	1,428	1,071	714	-	390	1,365	1,365	1,023	682	-
95	35.0	Q(Btu/h)	17,557	17,557	13,168	8,778	-	5,567	16,400	16,400	12,300	8,200	-	5,200	15,243	15,243	11,432	7,622	-	4,833
			W	1,447	1,447	1,085	724	-	396	1,390	1,390	1,043	695	-	380	1,333	1,333	1,000	666	-
90	32.2	Q(Btu/h)	18,101	18,101	13,576	9,051	-	5,739	17,012	17,012	12,759	8,506	-	5,394	15,788	15,788	11,841	7,894	-	5,006
			W	1,396	1,396	1,047	698	-	382	1,333	1,333	1,000	666	-	364	1,282	1,282	962	641	-
85	29.4	Q(Btu/h)	18,782	18,782	14,086	9,391	-	5,955	17,693	17,693	13,270	8,846	-	5,610	16,468	16,468	12,351	8,234	-	5,222
			W	1,346	1,346	1,009	673	-	368	1,282	1,282	962	641	-	351	1,238	1,238	928	619	-
80	26.7	Q(Btu/h)	19,326	19,326	14,495	9,663	-	6,128	18,237	18,237	13,678	9,119	-	5,783	17,149	17,149	12,861	8,574	-	5,437
			W	1,295	1,295	971	647	-	354	1,225	1,225	919	612	-	335	1,187	1,187	890	593	-
75	23.9	Q(Btu/h)	20,007	20,007	15,005	10,003	-	6,344	18,782	18,782	14,086	9,391	-	5,955	17,761	17,761	13,321	8,880	-	5,632
			W	1,238	1,238	928	619	-	338	1,168	1,168	876	584	-	319	1,141	1,141	856	571	-
70	21.1	Q(Btu/h)	20,483	20,483	15,362	10,241	-	6,495	19,190	19,190	14,393	9,595	-	6,085	18,373	18,373	13,780	9,187	-	5,826
			W	1,174	1,174	881	587	-	321	1,117	1,117	838	559	-	305	1,073	1,073	804	536	-
67	19.4	Q(Btu/h)	20,687	20,687	15,515	10,344	-	6,559	19,598	19,598	14,699	9,799	-	6,214	18,782	18,782	14,086	9,391	-	5,955
			W	1,117	1,117	838	559	-	305	1,073	1,073	804	536	-	293	1,016	1,016	762	508	-

* It may not reach the above capacities in low ambient temperatures.

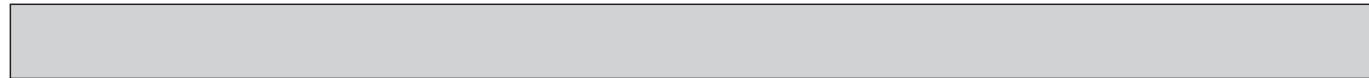
**MSZ-EX18NL
SUZ-AA18NLHZ**
2) HEATING

Rated

Q(Btu/h): 20,000
W: 1,700

Indoor D.B. Outdoor W.B. (°F) (°C)	Q(Btu/h)	77°F / 25.0°C						68°F / 20.0°C						59°F / 15.0°C						
		Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	
65	18.3 Q(Btu/h)	26,257	19,188	14,391	-	-	9,897	27,125	20,000	15,000	-	-	10,315	27,993	20,126	15,094	-	-	10,380	
		W	1,782	1,986	1,490	-	-	484	1,745	1,925	1,444	-	-	469	1,707	1,802	1,352	-	-	439
60	15.6 Q(Btu/h)	25,172	19,183	14,387	9,592	-	9,301	26,040	20,000	15,000	10,000	-	-	9,697	26,908	20,491	15,368	10,245	-	9,935
		W	1,779	1,930	1,448	965	-	488	1,741	1,866	1,399	933	-	472	1,702	1,755	1,316	878	-	444
55	12.8 Q(Btu/h)	24,087	19,164	14,373	9,582	-	8,699	24,955	20,000	15,000	10,000	-	-	9,078	25,823	20,918	15,688	10,459	-	9,495
		W	1,800	1,873	1,404	936	-	491	1,760	1,805	1,354	902	-	474	1,721	1,715	1,286	857	-	450
50	10.0 Q(Btu/h)	23,002	19,129	14,347	9,564	-	8,091	23,762	20,000	15,000	10,000	-	-	8,459	24,630	21,327	15,995	10,663	-	9,020
		W	1,846	1,813	1,360	907	-	493	1,804	1,742	1,307	871	-	474	1,763	1,681	1,261	840	-	457
45	7.2 Q(Btu/h)	19,700	18,797	14,098	9,399	-	7,478	20,500	19,709	14,782	9,855	-	-	7,840	21,300	21,490	16,118	10,745	-	8,549
		W	1,916	1,752	1,314	876	-	493	1,872	1,679	1,259	839	-	472	1,829	1,645	1,234	823	-	463
40	4.4 Q(Btu/h)	19,200	18,032	13,524	9,016	-	6,860	20,000	18,983	14,237	9,491	-	-	7,222	20,800	21,626	16,219	10,813	-	8,227
		W	2,012	1,689	1,266	844	-	491	1,964	1,613	1,210	807	-	469	1,917	1,625	1,219	813	-	472
35	1.7 Q(Btu/h)	19,200	17,247	12,935	8,624	-	6,238	20,000	18,256	13,692	9,128	-	-	6,603	20,800	21,229	15,922	10,614	-	7,678
		W	2,181	1,624	1,218	812	-	488	2,081	1,547	1,160	773	-	464	1,946	1,595	1,197	798	-	479
30	-1.1 Q(Btu/h)	19,200	16,240	12,180	8,120	-	5,613	20,000	17,315	12,986	8,657	-	-	5,984	20,800	20,092	15,069	10,046	-	6,944
		W	2,311	1,558	1,168	779	-	483	2,221	1,478	1,109	739	-	458	2,100	1,532	1,149	766	-	475
25	-3.9 Q(Btu/h)	19,200	14,913	11,185	7,457	-	4,985	20,000	16,052	12,039	8,026	-	-	5,365	20,800	19,542	14,656	9,771	-	6,532
		W	2,475	1,490	1,117	745	-	476	2,385	1,409	1,057	704	-	450	2,266	1,511	1,133	755	-	483
20	-6.7 Q(Btu/h)	19,200	13,569	10,177	6,785	-	4,355	20,000	14,790	11,092	7,395	-	-	4,747	20,800	18,475	13,856	9,237	-	5,929
		W	2,665	1,421	1,065	710	-	468	2,574	1,338	1,003	669	-	441	2,452	1,448	1,086	724	-	477
15	-9.4 Q(Btu/h)	19,200	12,207	9,155	6,104	-	3,725	20,000	13,527	10,145	6,764	-	-	4,128	20,800	17,305	12,979	8,653	-	5,281
		W	2,881	1,350	1,013	675	-	459	2,786	1,265	949	633	-	430	2,660	1,394	1,045	697	-	474
10	-12.2 Q(Btu/h)	19,200	10,825	8,119	5,413	-	3,097	20,000	12,265	9,199	6,132	-	-	3,509	20,800	16,138	12,104	8,069	-	4,617
		W	3,122	1,279	959	639	-	448	3,023	1,191	893	596	-	418	2,890	1,324	993	662	-	464
5	-15.0 Q(Btu/h)	19,200	9,419	7,064	4,710	-	2,475	20,000	11,002	8,252	5,501	-	-	2,890	20,800	14,623	10,967	7,311	-	3,842
		W	3,389	1,207	905	604	-	437	3,283	1,116	837	558	-	404	3,142	1,245	934	622	-	450
0	-17.8 Q(Btu/h)	14,246	7,985	5,989	3,992	1,996	1,862	17,809	9,740	7,305	4,870	2,435	-	2,272	15,342	12,116	9,087	6,058	3,029	2,826
		W	3,052	1,135	851	568	284	424	2,924	1,039	779	519	260	-	388	2,797	1,115	836	557	279
-4	-20.0 Q(Btu/h)	12,102	6,811	5,108	3,405	1,703	1,386	16,057	8,730	6,547	4,365	2,182	-	1,777	13,033	12,538	9,404	6,269	3,135	2,552
		W	2,908	1,079	809	539	270	414	2,770	976	732	488	244	-	374	2,632	1,047	786	524	262
-13	-25.0 Q(Btu/h)	7,278	4,208	3,156	2,104	1,052	294	12,113	6,457	4,843	3,228	1,614	-	663	7,838	9,857	7,393	4,928	2,464	1,130
		W	2,768	954	716	477	239	340	2,575	832	624	416	208	-	340	2,383	1,017	763	508	254

* Above data is for heating operation without any frost.



**SEZ-AE09NL
SUZ-AA09NLHZ
1) COOLING**

Rated
Q(Btu/h): 9,000
W: 760

Indoor W.B.			71°F / 21.7°C						67°F / 19.4°C						63°F / 17.2°C					
Outdoor D.B. (°F)	Indoor W.B. (°C)	Q(Btu/h)	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min
115	46.1	Q(Btu/h)	8,216	8,216	6,162	-	-	4,290	7,693	7,693	5,770	-	-	4,017	7,021	7,021	5,266	-	-	3,666
			W	854	854	640	-	-	449	833	833	625	-	-	438	798	798	599	-	-
110	43.3	Q(Btu/h)	8,589	8,589	6,442	-	-	4,485	7,992	7,992	5,994	-	-	4,173	7,320	7,320	5,490	-	-	3,822
			W	840	840	630	-	-	442	819	819	614	-	-	431	781	781	586	-	-
105	40.6	Q(Btu/h)	8,963	8,963	6,722	-	-	4,680	8,290	8,290	6,218	-	-	4,329	7,693	7,693	5,770	-	-	4,017
			W	829	829	622	-	-	437	798	798	599	-	-	420	763	763	573	-	-
100	37.8	Q(Btu/h)	9,261	9,261	6,946	-	-	4,837	8,664	8,664	6,498	-	-	4,524	7,992	7,992	5,994	-	-	4,173
			W	805	805	604	-	-	424	781	781	586	-	-	411	746	746	560	-	-
95	35.0	Q(Btu/h)	9,635	9,635	7,226	-	-	5,032	9,000	9,000	6,750	-	-	4,700	8,365	8,365	6,274	-	-	4,368
			W	791	791	593	-	-	416	760	760	570	-	-	400	729	729	547	-	-
90	32.2	Q(Btu/h)	9,934	9,934	7,450	-	-	5,188	9,336	9,336	7,002	-	-	4,876	8,664	8,664	6,498	-	-	4,524
			W	763	763	573	-	-	402	729	729	547	-	-	384	701	701	526	-	-
85	29.4	Q(Btu/h)	10,307	10,307	7,730	-	-	5,383	9,710	9,710	7,282	-	-	5,071	9,037	9,037	6,778	-	-	4,720
			W	736	736	552	-	-	387	701	701	526	-	-	369	677	677	508	-	-
80	26.7	Q(Btu/h)	10,606	10,606	7,954	-	-	5,539	10,008	10,008	7,506	-	-	5,227	9,411	9,411	7,058	-	-	4,915
			W	708	708	531	-	-	373	670	670	502	-	-	353	649	649	487	-	-
75	23.9	Q(Btu/h)	10,979	10,979	8,234	-	-	5,734	10,307	10,307	7,730	-	-	5,383	9,747	9,747	7,310	-	-	5,090
			W	677	677	508	-	-	356	639	639	479	-	-	336	624	624	468	-	-
70	21.1	Q(Btu/h)	11,241	11,241	8,430	-	-	5,870	10,531	10,531	7,898	-	-	5,500	10,083	10,083	7,562	-	-	5,266
			W	642	642	482	-	-	338	611	611	458	-	-	321	586	586	440	-	-
67	19.4	Q(Btu/h)	11,353	11,353	8,515	-	-	5,929	10,755	10,755	8,066	-	-	5,617	10,307	10,307	7,730	-	-	5,383
			W	611	611	458	-	-	321	586	586	440	-	-	309	555	555	416	-	-

* It may not reach the above capacities in low ambient temperatures.

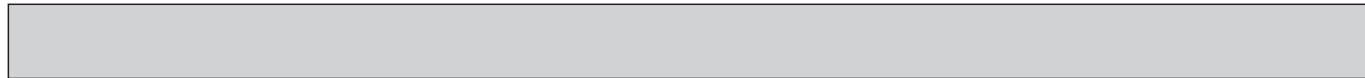
**SEZ-AE09NL
SUZ-AA09NLHZ**
2) HEATING

Rated

Q(Btu/h): 12,000
W: 1,210

Indoor D.B. Outdoor W.B. (°F) (°C)			77°F / 25.0°C						68°F / 20.0°C						59°F / 15.0°C						
			Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	
65	18.3	Q(Btu/h)	16,940	11,513	8,635	-	-	12,401	17,500	12,000	9,000	-	-	12,925	18,060	12,075	9,057	-	-	13,007	
			W	1,391	1,414	1,060	-	-	947	1,362	1,370	1,028	-	-	917	1,333	1,283	962	-	-	859
60	15.6	Q(Btu/h)	16,240	11,510	8,632	-	-	11,654	16,800	12,000	9,000	-	-	12,150	17,360	12,294	9,221	-	-	12,448	
			W	1,389	1,374	1,030	-	-	956	1,359	1,328	996	-	-	924	1,329	1,249	937	-	-	869
55	12.8	Q(Btu/h)	15,540	11,498	8,624	-	-	10,899	16,100	12,000	9,000	-	-	11,375	16,660	12,551	9,413	-	-	11,897	
			W	1,405	1,333	1,000	-	-	962	1,374	1,285	963	-	-	927	1,343	1,220	915	-	-	881
50	10.0	Q(Btu/h)	14,840	11,477	8,608	-	-	10,138	15,330	12,000	9,000	-	-	10,599	15,890	12,796	9,597	-	-	11,303	
			W	1,441	1,290	968	-	-	965	1,409	1,240	930	-	-	927	1,376	1,196	897	-	-	894
45	7.2	Q(Btu/h)	11,820	11,278	8,459	-	-	9,370	12,300	11,826	8,869	-	-	9,824	12,780	12,894	9,671	-	-	10,712	
			W	1,496	1,247	935	-	-	964	1,462	1,195	896	-	-	924	1,427	1,171	878	-	-	906
40	4.4	Q(Btu/h)	11,520	10,819	8,114	-	-	8,596	12,000	11,390	8,542	-	-	9,049	12,480	12,975	9,732	-	-	10,309	
			W	1,570	1,202	901	-	-	961	1,533	1,148	861	-	-	918	1,496	1,157	867	-	-	925
35	1.7	Q(Btu/h)	11,520	10,348	7,761	-	-	7,816	12,000	10,954	8,215	-	-	8,274	12,480	12,737	9,553	-	-	9,621	
			W	1,703	1,156	867	-	-	954	1,624	1,101	826	-	-	909	1,519	1,136	852	-	-	938
30	-1.1	Q(Btu/h)	11,520	9,744	7,308	-	-	7,033	12,000	10,389	7,792	-	-	7,498	12,480	12,055	9,042	-	-	8,701	
			W	1,804	1,109	831	-	-	945	1,734	1,052	789	-	-	897	1,639	1,091	818	-	-	930
25	-3.9	Q(Btu/h)	11,520	8,948	6,711	-	-	6,246	12,000	9,631	7,224	-	-	6,723	12,480	11,725	8,794	-	-	8,184	
			W	1,932	1,060	795	-	-	932	1,862	1,003	752	-	-	882	1,769	1,075	806	-	-	946
20	-6.7	Q(Btu/h)	11,520	8,142	6,106	-	-	5,457	12,000	8,874	6,655	-	-	5,948	12,480	11,085	8,314	-	-	7,429	
			W	2,080	1,011	758	-	-	917	2,009	952	714	-	-	863	1,914	1,030	773	-	-	934
15	-9.4	Q(Btu/h)	11,520	7,324	5,493	-	-	4,668	12,000	8,116	6,087	-	-	5,172	12,480	10,383	7,787	-	-	6,617	
			W	2,084	961	721	-	-	899	2,016	901	675	-	-	842	1,925	992	744	-	-	928
10	-12.2	Q(Btu/h)	11,520	6,495	4,871	-	-	3,881	12,000	7,359	5,519	-	-	4,397	12,480	9,683	7,262	-	-	5,786	
			W	2,090	910	683	-	-	878	2,023	848	636	-	-	818	1,934	942	707	-	-	908
5	-15.0	Q(Btu/h)	11,520	5,652	4,239	-	-	3,101	12,000	6,601	4,951	-	-	3,622	12,480	8,774	6,580	-	-	4,814	
			W	1,972	833	625	-	-	829	1,969	770	578	-	-	766	1,828	859	645	-	-	855
0	-17.8	Q(Btu/h)	9,191	4,791	3,593	2,395	-	2,334	10,686	5,844	4,383	2,922	-	2,846	9,898	7,270	5,452	3,635	-	3,541	
			W	1,945	808	606	404	-	830	1,864	739	555	370	-	759	1,783	793	595	397	-	815
-4	-20.0	Q(Btu/h)	7,808	4,086	3,065	2,043	-	1,737	9,634	5,238	3,928	2,619	-	2,226	8,408	7,523	5,642	3,761	-	3,197	
			W	1,853	768	576	384	-	810	1,765	695	521	347	-	733	1,678	746	559	373	-	786
-13	-25.0	Q(Btu/h)	4,696	2,525	1,894	1,263	631	369	7,268	3,874	2,906	1,937	969	-	831	5,057	5,914	4,436	2,957	1,479	1,415
			W	1,765	679	509	340	170	666	1,642	592	444	296	148	666	1,519	724	543	362	181	802

* Above data is for heating operation without any frost.



**SEZ-AE12NL
SUZ-AA12NLHZ
1) COOLING**

Rated
Q(Btu/h): 12,000
W: 900

Indoor W.B.			71°F / 21.7°C						67°F / 19.4°C						63°F / 17.2°C					
Outdoor D.B. (°F)	Outdoor D.B. (°C)	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	
115	46.1	Q(Btu/h)	10,954	10,954	8,216	5,477	-	4,564	10,257	10,257	7,693	5,129	-	4,274	9,361	9,361	7,021	4,680	-	3,900
		W	1,011	1,011	758	505	-	438	986	986	740	493	-	427	945	945	709	473	-	410
110	43.3	Q(Btu/h)	11,452	11,452	8,589	5,726	-	4,772	10,656	10,656	7,992	5,328	-	4,440	9,759	9,759	7,320	4,880	-	4,066
		W	995	995	746	497	-	431	970	970	727	485	-	420	925	925	693	462	-	401
105	40.6	Q(Btu/h)	11,950	11,950	8,963	5,975	-	4,979	11,054	11,054	8,290	5,527	-	4,606	10,257	10,257	7,693	5,129	-	4,274
		W	982	982	737	491	-	426	945	945	709	473	-	410	904	904	678	452	-	392
100	37.8	Q(Btu/h)	12,349	12,349	9,261	6,174	-	5,145	11,552	11,552	8,664	5,776	-	4,813	10,656	10,656	7,992	5,328	-	4,440
		W	953	953	715	477	-	413	925	925	693	462	-	401	884	884	663	442	-	383
95	35.0	Q(Btu/h)	12,846	12,846	9,635	6,423	-	5,353	12,000	12,000	9,000	6,000	-	5,000	11,154	11,154	8,365	5,577	-	4,647
		W	937	937	703	468	-	406	900	900	675	450	-	390	863	863	647	432	-	374
90	32.2	Q(Btu/h)	13,245	13,245	9,934	6,622	-	5,519	12,448	12,448	9,336	6,224	-	5,187	11,552	11,552	8,664	5,776	-	4,813
		W	904	904	678	452	-	392	863	863	647	432	-	374	830	830	623	415	-	360
85	29.4	Q(Btu/h)	13,743	13,743	10,307	6,871	-	5,726	12,946	12,946	9,710	6,473	-	5,394	12,050	12,050	9,037	6,025	-	5,021
		W	871	871	653	436	-	378	830	830	623	415	-	360	801	801	601	401	-	347
80	26.7	Q(Btu/h)	14,141	14,141	10,606	7,071	-	5,892	13,344	13,344	10,008	6,672	-	5,560	12,548	12,548	9,411	6,274	-	5,228
		W	838	838	629	419	-	363	793	793	595	397	-	344	768	768	576	384	-	333
75	23.9	Q(Btu/h)	14,639	14,639	10,979	7,320	-	6,100	13,743	13,743	10,307	6,871	-	5,726	12,996	12,996	9,747	6,498	-	5,415
		W	801	801	601	401	-	347	756	756	567	378	-	328	739	739	554	369	-	320
70	21.1	Q(Btu/h)	14,988	14,988	11,241	7,494	-	6,245	14,041	14,041	10,531	7,021	-	5,851	13,444	13,444	10,083	6,722	-	5,602
		W	760	760	570	380	-	329	723	723	542	362	-	313	695	695	521	347	-	301
67	19.4	Q(Btu/h)	15,137	15,137	11,353	7,568	-	6,307	14,340	14,340	10,755	7,170	-	5,975	13,743	13,743	10,307	6,871	-	5,726
		W	723	723	542	362	-	313	695	695	521	347	-	301	658	658	493	329	-	285

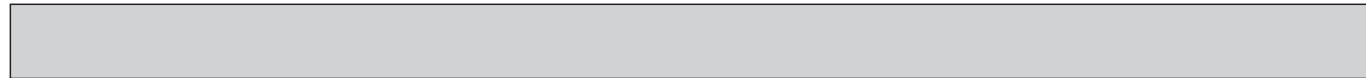
* It may not reach the above capacities in low ambient temperatures.

**SEZ-AE12NL
SUZ-AA12NLHZ**
2) HEATING

Rated
Q(Btu/h): 15,000
W: 1,240

Indoor D.B. Outdoor W.B. (°F) (°C)			77°F / 25.0°C						68°F / 20.0°C						59°F / 15.0°C						
			Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	
65	18.3	Q(Btu/h)	21,780	14,391	10,793	-	-	9,181	22,500	15,000	11,250	-	-	9,570	23,220	15,094	11,321	-	-	9,630	
			W	1,464	1,449	1,087	-	-	525	1,433	1,404	1,053	-	-	509	1,402	1,315	986	-	-	476
60	15.6	Q(Btu/h)	20,880	14,387	10,791	-	-	8,628	21,600	15,000	11,250	-	-	8,996	22,320	15,368	11,526	-	-	9,216	
			W	1,461	1,408	1,056	-	-	530	1,430	1,361	1,021	-	-	512	1,398	1,280	960	-	-	482
55	12.8	Q(Btu/h)	19,980	14,373	10,780	-	-	8,070	20,700	15,000	11,250	-	-	8,422	21,420	15,688	11,766	-	-	8,808	
			W	1,479	1,366	1,024	-	-	533	1,446	1,316	987	-	-	514	1,414	1,251	938	-	-	488
50	10.0	Q(Btu/h)	19,080	14,347	10,760	-	-	7,506	19,710	15,000	11,250	-	-	7,848	20,430	15,995	11,996	-	-	8,368	
			W	1,516	1,322	992	-	-	535	1,482	1,271	953	-	-	514	1,448	1,226	920	-	-	496
45	7.2	Q(Btu/h)	14,775	14,098	10,574	7,049	-	6,937	15,375	14,782	11,086	7,391	-	7,274	15,975	16,118	12,088	8,059	-	7,931	
			W	1,574	1,278	958	639	-	535	1,538	1,224	918	612	-	512	1,502	1,200	900	600	-	502
40	4.4	Q(Btu/h)	14,400	13,524	10,143	6,762	-	6,364	15,000	14,237	10,678	7,118	-	6,700	15,600	16,219	12,165	8,110	-	7,633	
			W	1,653	1,232	924	616	-	533	1,614	1,177	883	588	-	509	1,575	1,185	889	593	-	513
35	1.7	Q(Btu/h)	14,400	12,935	9,702	6,468	-	5,787	15,000	13,692	10,269	6,846	-	6,126	15,600	15,922	11,941	7,961	-	7,123	
			W	1,792	1,184	888	592	-	529	1,709	1,128	846	564	-	504	1,599	1,164	873	582	-	520
30	-1.1	Q(Btu/h)	14,400	12,180	9,135	6,090	-	5,207	15,000	12,986	9,740	6,493	-	5,552	15,600	15,069	11,302	7,535	-	6,442	
			W	1,899	1,136	852	568	-	524	1,824	1,078	809	539	-	497	1,725	1,118	838	559	-	515
25	-3.9	Q(Btu/h)	14,400	11,185	8,389	5,592	-	4,624	15,000	12,039	9,029	6,020	-	4,978	15,600	14,656	10,992	7,328	-	6,060	
			W	2,033	1,087	815	543	-	517	1,959	1,028	771	514	-	489	1,861	1,102	826	551	-	524
20	-6.7	Q(Btu/h)	14,400	10,177	7,633	5,088	-	4,040	15,000	11,092	8,319	5,546	-	4,404	15,600	13,856	10,392	6,928	-	5,501	
			W	2,189	1,036	777	518	-	508	2,114	976	732	488	-	479	2,014	1,056	792	528	-	518
15	-9.4	Q(Btu/h)	14,400	9,155	6,867	4,578	-	3,456	15,000	10,145	7,609	5,073	-	3,829	15,600	12,979	9,734	6,489	-	4,899	
			W	2,366	985	739	492	-	498	2,289	923	692	461	-	467	2,185	1,017	763	508	-	514
10	-12.2	Q(Btu/h)	14,400	8,119	6,089	4,059	-	2,873	15,000	9,199	6,899	4,599	-	3,255	15,600	12,104	9,078	6,052	-	4,284	
			W	2,419	933	700	466	-	487	2,342	869	652	434	-	453	2,239	965	724	483	-	504
5	-15.0	Q(Btu/h)	14,400	7,064	5,298	3,532	-	2,296	15,000	8,252	6,189	4,126	-	2,681	15,600	10,967	8,225	5,484	-	3,564	
			W	2,326	854	641	427	-	460	2,323	789	592	395	-	425	2,156	881	661	440	-	474
0	-17.8	Q(Btu/h)	11,817	5,989	4,491	2,994	-	1,728	13,357	7,305	5,479	3,652	-	2,107	12,726	9,087	6,815	4,544	-	2,622	
			W	2,295	828	621	414	-	460	2,199	758	568	379	-	421	2,103	813	610	407	-	452
-4	-20.0	Q(Btu/h)	10,039	5,108	3,831	2,554	-	1,286	12,043	6,547	4,910	3,274	-	1,648	10,811	9,404	7,053	4,702	-	2,367	
			W	2,186	787	590	393	-	449	2,083	712	534	356	-	406	1,979	764	573	382	-	436
-13	-25.0	Q(Btu/h)	6,037	3,156	2,367	1,578	789	273	9,085	4,843	3,632	2,421	1,211	-	615	6,502	7,393	5,545	3,696	1,848	1,048
			W	2,082	696	522	348	174	369	1,936	607	455	303	152	-	369	1,791	742	556	371	185

* Above data is for heating operation without any frost.



**SEZ-AE15NL
SUZ-AA15NLHZ
1) COOLING**

Rated
Q(Btu/h): 15,000
W: 1,220

Indoor W.B. Outdoor D.B. (°F) (°C)			71°F / 21.7°C						67°F / 19.4°C						63°F / 17.2°C					
			Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min
115	46.1	Q(Btu/h)	13,693	13,693	10,270	6,846	-	5,112	12,822	12,822	9,616	6,411	-	4,787	11,701	11,701	8,776	5,851	-	4,368
			W	1,370	1,370	1,028	685	-	461	1,337	1,337	1,003	668	-	449	1,281	1,281	961	641	-
110	43.3	Q(Btu/h)	14,315	14,315	10,737	7,158	-	5,344	13,320	13,320	9,990	6,660	-	4,973	12,199	12,199	9,149	6,100	-	4,554
			W	1,348	1,348	1,011	674	-	453	1,315	1,315	986	657	-	442	1,253	1,253	940	627	-
105	40.6	Q(Btu/h)	14,938	14,938	11,203	7,469	-	5,577	13,817	13,817	10,363	6,909	-	5,159	12,822	12,822	9,616	6,411	-	4,787
			W	1,331	1,331	999	666	-	447	1,281	1,281	961	641	-	431	1,226	1,226	919	613	-
100	37.8	Q(Btu/h)	15,436	15,436	11,577	7,718	-	5,763	14,440	14,440	10,830	7,220	-	5,391	13,320	13,320	9,990	6,660	-	4,973
			W	1,292	1,292	969	646	-	434	1,253	1,253	940	627	-	421	1,198	1,198	898	599	-
95	35.0	Q(Btu/h)	16,058	16,058	12,044	8,029	-	5,995	15,000	15,000	11,250	7,500	-	5,600	13,942	13,942	10,456	6,971	-	5,205
			W	1,270	1,270	953	635	-	427	1,220	1,220	915	610	-	410	1,170	1,170	877	585	-
90	32.2	Q(Btu/h)	16,556	16,556	12,417	8,278	-	6,181	15,560	15,560	11,670	7,780	-	5,809	14,440	14,440	10,830	7,220	-	5,391
			W	1,226	1,226	919	613	-	412	1,170	1,170	877	585	-	393	1,125	1,125	844	563	-
85	29.4	Q(Btu/h)	17,178	17,178	12,884	8,589	-	6,413	16,183	16,183	12,137	8,091	-	6,041	15,062	15,062	11,297	7,531	-	5,623
			W	1,181	1,181	886	591	-	397	1,125	1,125	844	563	-	378	1,086	1,086	815	543	-
80	26.7	Q(Btu/h)	17,676	17,676	13,257	8,838	-	6,599	16,680	16,680	12,510	8,340	-	6,227	15,685	15,685	11,763	7,842	-	5,856
			W	1,136	1,136	852	568	-	382	1,075	1,075	806	538	-	361	1,042	1,042	781	521	-
75	23.9	Q(Btu/h)	18,299	18,299	13,724	9,149	-	6,832	17,178	17,178	12,884	8,589	-	6,413	16,245	16,245	12,184	8,122	-	6,065
			W	1,086	1,086	815	543	-	365	1,025	1,025	769	513	-	344	1,002	1,002	751	501	-
70	21.1	Q(Btu/h)	18,734	18,734	14,051	9,367	-	6,994	17,552	17,552	13,164	8,776	-	6,553	16,805	16,805	12,604	8,402	-	6,274
			W	1,031	1,031	773	515	-	346	980	980	735	490	-	329	941	941	706	471	-
67	19.4	Q(Btu/h)	18,921	18,921	14,191	9,461	-	7,064	17,925	17,925	13,444	8,963	-	6,692	17,178	17,178	12,884	8,589	-	6,413
			W	980	980	735	490	-	329	941	941	706	471	-	316	891	891	668	446	-

* It may not reach the above capacities in low ambient temperatures.

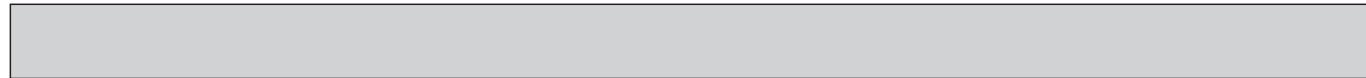
**SEZ-AE15NL
SUZ-AA15NLHZ**
2) HEATING

Rated

Q(Btu/h): 18,000
W: 1,430

Indoor D.B. Outdoor W.B. (°F) (°C)			77°F / 25.0°C						68°F / 20.0°C						59°F / 15.0°C					
			Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min
65	18.3	Q(Btu/h)	24,200	17,269	12,952	-	-	9,658	25,000	18,000	13,500	-	-	10,067	25,800	18,113	13,585	-	-	10,130
			W	1,501	1,671	1,253	-	-	514	1,469	1,619	1,214	-	-	499	1,437	1,516	1,137	-	-
60	15.6	Q(Btu/h)	23,200	17,265	12,949	-	-	9,077	24,000	18,000	13,500	-	-	9,463	24,800	18,441	13,831	-	-	9,695
			W	1,497	1,624	1,218	-	-	519	1,465	1,569	1,177	-	-	502	1,433	1,476	1,107	-	-
55	12.8	Q(Btu/h)	22,200	17,248	12,936	8,624	-	8,489	23,000	18,000	13,500	9,000	-	8,859	23,800	18,826	14,120	9,413	-	9,266
			W	1,515	1,575	1,181	788	-	523	1,482	1,518	1,139	759	-	504	1,449	1,442	1,082	721	-
50	10.0	Q(Btu/h)	21,200	17,216	12,912	8,608	-	7,896	21,900	18,000	13,500	9,000	-	8,255	22,700	19,194	14,396	9,597	-	8,803
			W	1,554	1,525	1,144	763	-	524	1,519	1,466	1,099	733	-	504	1,484	1,414	1,060	707	-
45	7.2	Q(Btu/h)	17,730	16,918	12,688	8,459	-	7,298	18,450	17,738	13,304	8,869	-	7,652	19,170	19,341	14,506	9,671	-	8,343
			W	1,613	1,473	1,105	737	-	524	1,576	1,412	1,059	706	-	502	1,539	1,384	1,038	692	-
40	4.4	Q(Btu/h)	17,280	16,229	12,171	8,114	-	6,695	18,000	17,084	12,813	8,542	-	7,048	18,720	19,463	14,597	9,732	-	8,029
			W	1,694	1,420	1,065	710	-	522	1,654	1,357	1,018	679	-	499	1,614	1,367	1,025	683	-
35	1.7	Q(Btu/h)	17,280	15,522	11,642	7,761	-	6,088	18,000	16,430	12,323	8,215	-	6,444	18,720	19,106	14,329	9,553	-	7,493
			W	1,836	1,366	1,024	683	-	519	1,752	1,301	976	651	-	494	1,639	1,342	1,007	671	-
30	-1.1	Q(Btu/h)	17,280	14,616	10,962	7,308	-	5,477	18,000	15,583	11,688	7,792	-	5,840	18,720	18,083	13,562	9,042	-	6,777
			W	1,946	1,310	983	655	-	514	1,870	1,244	933	622	-	487	1,768	1,289	967	645	-
25	-3.9	Q(Btu/h)	17,280	13,422	10,066	6,711	-	4,865	18,000	14,447	10,835	7,224	-	5,236	18,720	17,588	13,191	8,794	-	6,374
			W	2,083	1,253	940	627	-	507	2,008	1,185	889	593	-	479	1,908	1,271	953	635	-
20	-6.7	Q(Btu/h)	17,280	12,212	9,159	6,106	-	4,250	18,000	13,311	9,983	6,655	-	4,632	18,720	16,627	12,470	8,314	-	5,786
			W	2,243	1,195	896	598	-	498	2,167	1,125	844	563	-	469	2,064	1,218	913	609	-
15	-9.4	Q(Btu/h)	17,280	10,987	8,240	5,493	-	3,635	18,000	12,175	9,131	6,087	-	4,028	18,720	15,575	11,681	7,787	-	5,154
			W	2,425	1,136	852	568	-	488	2,345	1,064	798	532	-	458	2,239	1,173	879	586	-
10	-12.2	Q(Btu/h)	17,280	9,743	7,307	4,871	-	3,023	18,000	11,038	8,279	5,519	-	3,425	18,720	14,525	10,893	7,262	-	4,506
			W	2,628	1,076	807	538	-	477	2,545	1,002	752	501	-	444	2,433	1,113	835	557	-
5	-15.0	Q(Btu/h)	17,280	8,477	6,358	4,239	-	2,415	18,000	9,902	7,426	4,951	-	2,821	18,720	13,161	9,870	6,580	-	3,749
			W	2,698	1,015	762	508	-	465	2,614	939	704	469	-	429	2,501	1,047	785	524	-
0	-17.8	Q(Btu/h)	13,130	7,186	5,390	3,593	-	1,817	16,028	8,766	6,574	4,383	-	2,217	14,140	10,905	8,179	5,452	-	2,758
			W	2,430	955	716	477	-	451	2,328	874	655	437	-	413	2,226	938	703	469	-
-4	-20.0	Q(Btu/h)	11,154	6,129	4,597	3,065	1,532	1,353	14,451	7,857	5,892	3,928	1,964	1,734	12,012	11,284	8,463	5,642	2,821	2,490
			W	2,315	907	681	454	227	440	2,205	821	616	411	205	398	2,095	881	661	441	220
-13	-25.0	Q(Btu/h)	6,708	3,788	2,841	1,894	947	287	10,902	5,811	4,358	2,906	1,453	647	7,224	8,871	6,653	4,436	2,218	1,102
			W	2,204	803	602	401	201	362	2,050	700	525	350	175	362	1,897	855	641	428	214

* Above data is for heating operation without any frost.



**SEZ-AE18NL
SUZ-AA18NLHZ
1) COOLING**

Rated
Q(Btu/h): 18,000
W: 1,400

Indoor W.B. Outdoor D.B. (°F) (°C)			71°F / 21.7°C						67°F / 19.4°C						63°F / 17.2°C					
			Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min
115	46.1	Q(Btu/h)	16,432	16,432	12,324	8,216	-	4,929	15,386	15,386	11,539	7,693	-	4,616	14,041	14,041	10,531	7,021	-	4,212
			W	1,573	1,573	1,179	786	-	438	1,534	1,534	1,151	767	-	427	1,470	1,470	1,103	735	-
110	43.3	Q(Btu/h)	17,178	17,178	12,884	8,589	-	5,154	15,983	15,983	11,988	7,992	-	4,795	14,639	14,639	10,979	7,320	-	4,392
			W	1,547	1,547	1,160	774	-	431	1,509	1,509	1,132	754	-	420	1,438	1,438	1,079	719	-
105	40.6	Q(Btu/h)	17,925	17,925	13,444	8,963	-	5,378	16,581	16,581	12,436	8,290	-	4,974	15,386	15,386	11,539	7,693	-	4,616
			W	1,528	1,528	1,146	764	-	426	1,470	1,470	1,103	735	-	410	1,406	1,406	1,055	703	-
100	37.8	Q(Btu/h)	18,523	18,523	13,892	9,261	-	5,557	17,328	17,328	12,996	8,664	-	5,198	15,983	15,983	11,988	7,992	-	4,795
			W	1,483	1,483	1,112	742	-	413	1,438	1,438	1,079	719	-	401	1,374	1,374	1,031	687	-
95	35.0	Q(Btu/h)	19,270	19,270	14,452	9,635	-	5,781	18,000	18,000	13,500	9,000	-	5,400	16,730	16,730	12,548	8,365	-	5,019
			W	1,458	1,458	1,093	729	-	406	1,400	1,400	1,050	700	-	390	1,342	1,342	1,007	671	-
90	32.2	Q(Btu/h)	19,867	19,867	14,900	9,934	-	5,960	18,672	18,672	14,004	9,336	-	5,602	17,328	17,328	12,996	8,664	-	5,198
			W	1,406	1,406	1,055	703	-	392	1,342	1,342	1,007	671	-	374	1,291	1,291	968	646	-
85	29.4	Q(Btu/h)	20,614	20,614	15,461	10,307	-	6,184	19,419	19,419	14,564	9,710	-	5,826	18,075	18,075	13,556	9,037	-	5,422
			W	1,355	1,355	1,016	678	-	378	1,291	1,291	968	646	-	360	1,247	1,247	935	623	-
80	26.7	Q(Btu/h)	21,212	21,212	15,909	10,606	-	6,363	20,017	20,017	15,012	10,008	-	6,005	18,822	18,822	14,116	9,411	-	5,646
			W	1,304	1,304	978	652	-	363	1,234	1,234	925	617	-	344	1,195	1,195	897	598	-
75	23.9	Q(Btu/h)	21,959	21,959	16,469	10,979	-	6,588	20,614	20,614	15,461	10,307	-	6,184	19,494	19,494	14,620	9,747	-	5,848
			W	1,247	1,247	935	623	-	347	1,176	1,176	882	588	-	328	1,149	1,149	862	575	-
70	21.1	Q(Btu/h)	22,481	22,481	16,861	11,241	-	6,744	21,062	21,062	15,797	10,531	-	6,319	20,166	20,166	15,124	10,083	-	6,050
			W	1,183	1,183	887	591	-	329	1,125	1,125	844	563	-	313	1,080	1,080	810	540	-
67	19.4	Q(Btu/h)	22,705	22,705	17,029	11,353	-	6,812	21,510	21,510	16,133	10,755	-	6,453	20,614	20,614	15,461	10,307	-	6,184
			W	1,125	1,125	844	563	-	313	1,080	1,080	810	540	-	301	1,023	1,023	767	511	-

* It may not reach the above capacities in low ambient temperatures.

**SEZ-AE18NL
SUZ-AA18NLHZ**
2) HEATING

Rated

Q(Btu/h): 20,000
W: 1,510

Indoor D.B. Outdoor W.B. (°F) (°C)	Q(Btu/h)	77°F / 25.0°C						68°F / 20.0°C						59°F / 15.0°C						
		Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	
65	18.3 Q(Btu/h)	28,435	19,188	14,391	-	-	9,897	29,375	20,000	15,000	-	-	10,315	30,315	20,126	15,094	-	-	10,380	
		W	1,737	1,764	1,323	-	-	494	1,700	1,710	1,282	-	-	479	1,664	1,601	1,201	-	-	448
60	15.6 Q(Btu/h)	27,260	19,183	14,387	9,592	-	9,301	28,200	20,000	15,000	10,000	-	-	9,697	29,140	20,491	15,368	10,245	-	9,935
		W	1,733	1,715	1,286	857	-	499	1,696	1,657	1,243	829	-	482	1,659	1,559	1,169	779	-	453
55	12.8 Q(Btu/h)	26,085	19,164	14,373	9,582	-	8,699	27,025	20,000	15,000	10,000	-	-	9,078	27,965	20,918	15,688	10,459	-	9,495
		W	1,754	1,663	1,247	832	-	502	1,716	1,603	1,202	802	-	484	1,677	1,523	1,142	762	-	459
50	10.0 Q(Btu/h)	24,910	19,129	14,347	9,564	-	8,091	25,733	20,000	15,000	10,000	-	-	8,459	26,673	21,327	15,995	10,663	-	9,020
		W	1,799	1,610	1,208	805	-	503	1,758	1,548	1,161	774	-	484	1,718	1,493	1,120	747	-	467
45	7.2 Q(Btu/h)	19,700	18,797	14,098	9,399	-	7,478	20,500	19,709	14,782	9,855	-	-	7,840	21,300	21,490	16,118	10,745	-	8,549
		W	1,867	1,556	1,167	778	-	503	1,825	1,491	1,118	746	-	482	1,782	1,462	1,096	731	-	473
40	4.4 Q(Btu/h)	19,200	18,032	13,524	9,016	-	6,860	20,000	18,983	14,237	9,491	-	-	7,222	20,800	21,626	16,219	10,813	-	8,227
		W	1,960	1,500	1,125	750	-	501	1,914	1,433	1,075	717	-	479	1,868	1,443	1,083	722	-	483
35	1.7 Q(Btu/h)	19,200	17,247	12,935	8,624	-	6,238	20,000	18,256	13,692	9,128	-	-	6,603	20,800	21,229	15,922	10,614	-	7,678
		W	2,126	1,442	1,082	721	-	498	2,028	1,374	1,030	687	-	474	1,897	1,417	1,063	709	-	489
30	-1.1 Q(Btu/h)	19,200	16,240	12,180	8,120	-	5,613	20,000	17,315	12,986	8,657	-	-	5,984	20,800	20,092	15,069	10,046	-	6,944
		W	2,253	1,383	1,038	692	-	493	2,164	1,313	985	657	-	468	2,046	1,361	1,021	681	-	485
25	-3.9 Q(Btu/h)	19,200	14,913	11,185	7,457	-	4,985	20,000	16,052	12,039	8,026	-	-	5,365	20,800	19,542	14,656	9,771	-	6,532
		W	2,411	1,323	992	662	-	486	2,324	1,251	939	626	-	460	2,208	1,342	1,006	671	-	493
20	-6.7 Q(Btu/h)	19,200	13,569	10,177	6,785	-	4,355	20,000	14,790	11,092	7,395	-	-	4,747	20,800	18,475	13,856	9,237	-	5,929
		W	2,597	1,262	946	631	-	478	2,508	1,188	891	594	-	450	2,389	1,286	964	643	-	488
15	-9.4 Q(Btu/h)	19,200	12,207	9,155	6,104	-	3,725	20,000	13,527	10,145	6,764	-	-	4,128	20,800	17,305	12,979	8,653	-	5,281
		W	2,807	1,199	900	600	-	469	2,715	1,124	843	562	-	439	2,592	1,238	929	619	-	484
10	-12.2 Q(Btu/h)	19,200	10,825	8,119	5,413	-	3,097	20,000	12,265	9,199	6,132	-	-	3,509	20,800	16,138	12,104	8,069	-	4,617
		W	3,043	1,136	852	568	-	458	2,946	1,058	794	529	-	427	2,816	1,176	882	588	-	474
5	-15.0 Q(Btu/h)	19,200	9,419	7,064	4,710	-	2,475	20,000	11,002	8,252	5,501	-	-	2,890	20,800	14,623	10,967	7,311	-	3,842
		W	3,014	1,040	780	520	-	433	3,010	961	721	481	-	400	2,795	1,073	804	536	-	446
0	-17.8 Q(Btu/h)	15,428	7,985	5,989	3,992	1,996	1,862	17,809	9,740	7,305	4,870	2,435	-	2,272	16,615	12,116	9,087	6,058	3,029	2,826
		W	2,974	1,008	756	504	252	433	2,850	923	692	461	231	-	396	2,725	990	743	495	248
-4	-20.0 Q(Btu/h)	13,106	6,811	5,108	3,405	1,703	1,386	16,057	8,730	6,547	4,365	2,182	-	1,777	14,114	12,538	9,404	6,269	3,135	2,552
		W	2,833	958	719	479	240	422	2,699	867	650	434	217	-	382	2,565	930	698	465	233
-13	-25.0 Q(Btu/h)	7,882	4,208	3,156	2,104	1,052	294	12,113	6,457	4,843	3,228	1,614	-	663	8,488	9,857	7,393	4,928	2,464	1,130
		W	2,698	848	636	424	212	347	2,510	739	554	370	185	-	347	2,322	903	677	452	226

* Above data is for heating operation without any frost.



**PEAD-AA09NL
SUZ-AA09NLHZ
1) COOLING**

Rated
Q(Btu/h): 9,000
W: 750

		71°F / 21.7°C						67°F / 19.4°C						63°F / 17.2°C						
Indoor W.B.	Outdoor D.B.	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	
(°F)	(°C)																			
115	46.1	Q(Btu/h)	8,216	8,216	6,162	-	-	4,747	7,693	7,693	5,770	-	-	4,445	7,021	7,021	5,266	-	-	4,056
		W	842	842	632	-	-	438	822	822	616	-	-	427	788	788	591	-	-	410
110	43.3	Q(Btu/h)	8,589	8,589	6,442	-	-	4,963	7,992	7,992	5,994	-	-	4,617	7,320	7,320	5,490	-	-	4,229
		W	829	829	622	-	-	431	808	808	606	-	-	420	771	771	578	-	-	401
105	40.6	Q(Btu/h)	8,963	8,963	6,722	-	-	5,178	8,290	8,290	6,218	-	-	4,790	7,693	7,693	5,770	-	-	4,445
		W	818	818	614	-	-	426	788	788	591	-	-	410	753	753	565	-	-	392
100	37.8	Q(Btu/h)	9,261	9,261	6,946	-	-	5,351	8,664	8,664	6,498	-	-	5,006	7,992	7,992	5,994	-	-	4,617
		W	795	795	596	-	-	413	771	771	578	-	-	401	736	736	552	-	-	383
95	35.0	Q(Btu/h)	9,635	9,635	7,226	-	-	5,567	9,000	9,000	6,750	-	-	5,200	8,365	8,365	6,274	-	-	4,833
		W	781	781	586	-	-	406	750	750	563	-	-	390	719	719	539	-	-	374
90	32.2	Q(Btu/h)	9,934	9,934	7,450	-	-	5,739	9,336	9,336	7,002	-	-	5,394	8,664	8,664	6,498	-	-	5,006
		W	753	753	565	-	-	392	719	719	539	-	-	374	692	692	519	-	-	360
85	29.4	Q(Btu/h)	10,307	10,307	7,730	-	-	5,955	9,710	9,710	7,282	-	-	5,610	9,037	9,037	6,778	-	-	5,222
		W	726	726	545	-	-	378	692	692	519	-	-	360	668	668	501	-	-	347
80	26.7	Q(Btu/h)	10,606	10,606	7,954	-	-	6,128	10,008	10,008	7,506	-	-	5,783	9,411	9,411	7,058	-	-	5,437
		W	699	699	524	-	-	363	661	661	496	-	-	344	640	640	480	-	-	333
75	23.9	Q(Btu/h)	10,979	10,979	8,234	-	-	6,344	10,307	10,307	7,730	-	-	5,955	9,747	9,747	7,310	-	-	5,632
		W	668	668	501	-	-	347	630	630	473	-	-	328	616	616	462	-	-	320
70	21.1	Q(Btu/h)	11,241	11,241	8,430	-	-	6,495	10,531	10,531	7,898	-	-	6,085	10,083	10,083	7,562	-	-	5,826
		W	634	634	475	-	-	329	603	603	452	-	-	313	579	579	434	-	-	301
67	19.4	Q(Btu/h)	11,353	11,353	8,515	-	-	6,559	10,755	10,755	8,066	-	-	6,214	10,307	10,307	7,730	-	-	5,955
		W	603	603	452	-	-	313	579	579	434	-	-	301	548	548	411	-	-	285

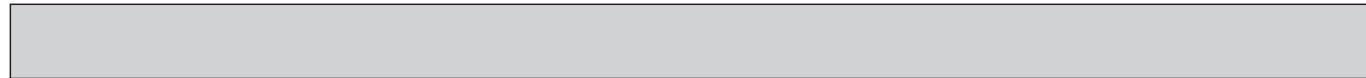
* It may not reach the above capacities in low ambient temperatures.

**PEAD-AA09NL
SUZ-AA09NLHZ**
2) HEATING

Rated
Q(Btu/h): 12,000
W: 1,010

Indoor D.B. Outdoor W.B. (°F) (°C)			77°F / 25.0°C						68°F / 20.0°C						59°F / 15.0°C						
			Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	
65	18.3	Q(Btu/h)	17,787	11,513	8,635	-	-	9,181	18,375	12,000	9,000	-	-	9,570	18,963	12,075	9,057	-	-	9,630	
			W	1,182	1,180	885	-	-	525	1,157	1,144	858	-	-	509	1,132	1,071	803	-	-	476
60	15.6	Q(Btu/h)	17,052	11,510	8,632	-	-	8,628	17,640	12,000	9,000	-	-	8,996	18,228	12,294	9,221	-	-	9,216	
			W	1,180	1,147	860	-	-	530	1,154	1,108	831	-	-	512	1,129	1,043	782	-	-	482
55	12.8	Q(Btu/h)	16,317	11,498	8,624	-	-	8,070	16,905	12,000	9,000	-	-	8,422	17,493	12,551	9,413	-	-	8,808	
			W	1,194	1,113	834	-	-	533	1,168	1,072	804	-	-	514	1,141	1,019	764	-	-	488
50	10.0	Q(Btu/h)	15,582	11,477	8,608	-	-	7,506	16,097	12,000	9,000	-	-	7,848	16,685	12,796	9,597	-	-	8,368	
			W	1,224	1,077	808	-	-	535	1,197	1,035	776	-	-	514	1,169	999	749	-	-	496
45	7.2	Q(Btu/h)	11,820	11,278	8,459	-	-	6,937	12,300	11,826	8,869	-	-	7,274	12,780	12,894	9,671	-	-	7,931	
			W	1,271	1,041	781	-	-	535	1,242	997	748	-	-	512	1,213	978	733	-	-	502
40	4.4	Q(Btu/h)	11,520	10,819	8,114	-	-	6,364	12,000	11,390	8,542	-	-	6,700	12,480	12,975	9,732	-	-	7,633	
			W	1,334	1,003	752	-	-	533	1,303	959	719	-	-	509	1,272	965	724	-	-	513
35	1.7	Q(Btu/h)	11,520	10,348	7,761	-	-	5,787	12,000	10,954	8,215	-	-	6,126	12,480	12,737	9,553	-	-	7,123	
			W	1,447	965	724	-	-	529	1,380	919	689	-	-	504	1,291	948	711	-	-	520
30	-1.1	Q(Btu/h)	11,520	9,744	7,308	-	-	5,207	12,000	10,389	7,792	-	-	5,552	12,480	12,055	9,042	-	-	6,442	
			W	1,533	925	694	-	-	524	1,473	878	659	-	-	497	1,393	910	683	-	-	515
25	-3.9	Q(Btu/h)	11,520	8,948	6,711	-	-	4,624	12,000	9,631	7,224	-	-	4,978	12,480	11,725	8,794	-	-	6,060	
			W	1,641	885	664	-	-	517	1,582	837	628	-	-	489	1,503	898	673	-	-	524
20	-6.7	Q(Btu/h)	11,520	8,142	6,106	4,071	-	4,040	12,000	8,874	6,655	4,437	-	4,404	12,480	11,085	8,314	5,542	-	5,501	
			W	1,768	844	633	422	-	508	1,707	795	596	397	-	479	1,626	860	645	430	-	518
15	-9.4	Q(Btu/h)	11,520	7,324	5,493	3,662	-	3,456	12,000	8,116	6,087	4,058	-	3,829	12,480	10,383	7,787	5,192	-	4,899	
			W	1,789	802	602	401	-	498	1,731	752	564	376	-	467	1,653	828	621	414	-	514
10	-12.2	Q(Btu/h)	11,520	6,495	4,871	3,248	-	2,873	12,000	7,359	5,519	3,679	-	3,255	12,480	9,683	7,262	4,842	-	4,284	
			W	1,812	760	570	380	-	487	1,755	708	531	354	-	453	1,677	786	590	393	-	504
5	-15.0	Q(Btu/h)	11,520	5,652	4,239	2,826	-	2,296	12,000	6,601	4,951	3,301	-	2,681	12,480	8,774	6,580	4,387	-	3,564	
			W	1,836	717	538	359	-	474	1,778	663	497	331	-	438	1,702	740	555	370	-	489
0	-17.8	Q(Btu/h)	9,651	4,791	3,593	2,395	-	1,728	10,686	5,844	4,383	2,922	-	2,107	10,393	7,270	5,452	3,635	-	2,622	
			W	1,653	674	506	337	-	460	1,584	617	463	309	-	421	1,515	662	497	331	-	452
-4	-20.0	Q(Btu/h)	8,198	4,086	3,065	2,043	-	1,286	9,634	5,238	3,928	2,619	-	1,648	8,829	7,523	5,642	3,761	-	2,367	
			W	1,575	641	481	320	-	449	1,500	580	435	290	-	406	1,425	622	467	311	-	436
-13	-25.0	Q(Btu/h)	4,930	2,525	1,894	1,263	631	273	7,268	3,874	2,906	1,937	969	-	615	5,310	5,914	4,436	2,957	1,479	1,048
			W	1,499	567	425	283	142	369	1,395	494	371	247	124	-	369	1,290	604	453	302	151

* Above data is for heating operation without any frost.



**PEAD-AA12NL
SUZ-AA12NLHZ
1) COOLING**

Rated
Q(Btu/h): 12,000
W: 880

Indoor W.B. Outdoor D.B. (°F) (°C)			71°F / 21.7°C						67°F / 19.4°C						63°F / 17.2°C					
			Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min
115	46.1	Q(Btu/h)	10,954	10,954	8,216	5,477	-	4,929	10,257	10,257	7,693	5,129	-	4,616	9,361	9,361	7,021	4,680	-	4,212
		W	988	988	741	494	-	438	964	964	723	482	-	427	924	924	693	462	-	410
110	43.3	Q(Btu/h)	11,452	11,452	8,589	5,726	-	5,154	10,656	10,656	7,992	5,328	-	4,795	9,759	9,759	7,320	4,880	-	4,392
		W	972	972	729	486	-	431	948	948	711	474	-	420	904	904	678	452	-	401
105	40.6	Q(Btu/h)	11,950	11,950	8,963	5,975	-	5,378	11,054	11,054	8,290	5,527	-	4,974	10,257	10,257	7,693	5,129	-	4,616
		W	960	960	720	480	-	426	924	924	693	462	-	410	884	884	663	442	-	392
100	37.8	Q(Btu/h)	12,349	12,349	9,261	6,174	-	5,557	11,552	11,552	8,664	5,776	-	5,198	10,656	10,656	7,992	5,328	-	4,795
		W	932	932	699	466	-	413	904	904	678	452	-	401	864	864	648	432	-	383
95	35.0	Q(Btu/h)	12,846	12,846	9,635	6,423	-	5,781	12,000	12,000	9,000	6,000	-	5,400	11,154	11,154	8,365	5,577	-	5,019
		W	916	916	687	458	-	406	880	880	660	440	-	390	844	844	633	422	-	374
90	32.2	Q(Btu/h)	13,245	13,245	9,934	6,622	-	5,960	12,448	12,448	9,336	6,224	-	5,602	11,552	11,552	8,664	5,776	-	5,198
		W	884	884	663	442	-	392	844	844	633	422	-	374	812	812	609	406	-	360
85	29.4	Q(Btu/h)	13,743	13,743	10,307	6,871	-	6,184	12,946	12,946	9,710	6,473	-	5,826	12,050	12,050	9,037	6,025	-	5,422
		W	852	852	639	426	-	378	812	812	609	406	-	360	784	784	588	392	-	347
80	26.7	Q(Btu/h)	14,141	14,141	10,606	7,071	-	6,363	13,344	13,344	10,008	6,672	-	6,005	12,548	12,548	9,411	6,274	-	5,646
		W	820	820	615	410	-	363	776	776	582	388	-	344	751	751	564	376	-	333
75	23.9	Q(Btu/h)	14,639	14,639	10,979	7,320	-	6,588	13,743	13,743	10,307	6,871	-	6,184	12,996	12,996	9,747	6,498	-	5,848
		W	784	784	588	392	-	347	739	739	555	370	-	328	722	722	542	361	-	320
70	21.1	Q(Btu/h)	14,988	14,988	11,241	7,494	-	6,744	14,041	14,041	10,531	7,021	-	6,319	13,444	13,444	10,083	6,722	-	6,050
		W	743	743	558	372	-	329	707	707	530	354	-	313	679	679	509	340	-	301
67	19.4	Q(Btu/h)	15,137	15,137	11,353	7,568	-	6,812	14,340	14,340	10,755	7,170	-	6,453	13,743	13,743	10,307	6,871	-	6,184
		W	707	707	530	354	-	313	679	679	509	340	-	301	643	643	482	321	-	285

* It may not reach the above capacities in low ambient temperatures.

**PEAD-AA12NL
SUZ-AA12NLHZ**
2) HEATING

Rated
Q(Btu/h): 15,000
W: 1,200

Indoor D.B. Outdoor W.B. (°F) (°C)			77°F / 25.0°C						68°F / 20.0°C						59°F / 15.0°C						
			Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	
65	18.3	Q(Btu/h)	21,780	14,391	10,793	-	-	9,420	22,500	15,000	11,250	-	-	9,818	23,220	15,094	11,321	-	-	9,880	
			W	1,446	1,402	1,052	-	-	504	1,415	1,359	1,019	-	-	489	1,385	1,272	954	-	-	457
60	15.6	Q(Btu/h)	20,880	14,387	10,791	-	-	8,852	21,600	15,000	11,250	-	-	9,229	22,320	15,368	11,526	-	-	9,456	
			W	1,443	1,363	1,022	-	-	509	1,412	1,317	988	-	-	492	1,381	1,239	929	-	-	463
55	12.8	Q(Btu/h)	19,980	14,373	10,780	-	-	8,279	20,700	15,000	11,250	-	-	8,640	21,420	15,688	11,766	-	-	9,037	
			W	1,460	1,322	991	-	-	512	1,428	1,274	955	-	-	494	1,396	1,210	908	-	-	469
50	10.0	Q(Btu/h)	19,080	14,347	10,760	-	-	7,701	19,710	15,000	11,250	-	-	8,052	20,430	15,995	11,996	-	-	8,586	
			W	1,497	1,280	960	-	-	514	1,464	1,230	922	-	-	494	1,430	1,187	890	-	-	476
45	7.2	Q(Btu/h)	14,775	14,098	10,574	-	-	7,117	15,375	14,782	11,086	-	-	7,463	15,975	16,118	12,088	-	-	8,137	
			W	1,554	1,236	927	-	-	514	1,519	1,185	889	-	-	492	1,483	1,161	871	-	-	482
40	4.4	Q(Btu/h)	14,400	13,524	10,143	6,762	-	6,529	15,000	14,237	10,678	7,118	-	6,874	15,600	16,219	12,165	8,110	-	7,831	
			W	1,632	1,192	894	596	-	512	1,594	1,139	854	569	-	489	1,555	1,147	860	574	-	493
35	1.7	Q(Btu/h)	14,400	12,935	9,702	6,468	-	5,937	15,000	13,692	10,269	6,846	-	6,285	15,600	15,922	11,941	7,961	-	7,308	
			W	1,769	1,146	860	573	-	508	1,688	1,092	819	546	-	484	1,579	1,126	845	563	-	499
30	-1.1	Q(Btu/h)	14,400	12,180	9,135	6,090	-	5,342	15,000	12,986	9,740	6,493	-	5,696	15,600	15,069	11,302	7,535	-	6,609	
			W	1,875	1,099	825	550	-	503	1,802	1,044	783	522	-	478	1,704	1,082	811	541	-	495
25	-3.9	Q(Btu/h)	14,400	11,185	8,389	5,592	-	4,744	15,000	12,039	9,029	6,020	-	5,107	15,600	14,656	10,992	7,328	-	6,217	
			W	2,007	1,052	789	526	-	497	1,935	994	746	497	-	470	1,838	1,066	800	533	-	504
20	-6.7	Q(Btu/h)	14,400	10,177	7,633	5,088	-	4,145	15,000	11,092	8,319	5,546	-	4,518	15,600	13,856	10,392	6,928	-	5,644	
			W	2,162	1,003	752	501	-	488	2,088	944	708	472	-	460	1,989	1,022	766	511	-	498
15	-9.4	Q(Btu/h)	14,400	9,155	6,867	4,578	-	3,546	15,000	10,145	7,609	5,073	-	3,929	15,600	12,979	9,734	6,489	-	5,026	
			W	2,337	953	715	477	-	479	2,260	893	670	447	-	448	2,158	984	738	492	-	494
10	-12.2	Q(Btu/h)	14,400	8,119	6,089	4,059	-	2,948	15,000	9,199	6,899	4,599	-	3,340	15,600	12,104	9,078	6,052	-	4,395	
			W	2,389	903	677	451	-	468	2,313	841	631	420	-	435	2,211	934	701	467	-	484
5	-15.0	Q(Btu/h)	14,400	7,064	5,298	3,532	-	2,355	15,000	8,252	6,189	4,126	-	2,751	15,600	10,967	8,225	5,484	-	3,656	
			W	2,297	827	620	413	-	442	2,294	764	573	382	-	408	2,129	852	639	426	-	455
0	-17.8	Q(Btu/h)	11,817	5,989	4,491	2,994	-	1,773	13,357	7,305	5,479	3,652	-	2,162	12,726	9,087	6,815	4,544	-	2,690	
			W	2,266	801	601	401	-	442	2,172	733	550	367	-	405	2,077	787	590	393	-	434
-4	-20.0	Q(Btu/h)	10,039	5,108	3,831	2,554	-	1,319	12,043	6,547	4,910	3,274	-	1,691	10,811	9,404	7,053	4,702	-	2,429	
			W	2,159	761	571	381	-	431	2,057	689	517	345	-	390	1,954	739	555	370	-	419
-13	-25.0	Q(Btu/h)	6,037	3,156	2,367	1,578	789	280	9,085	4,843	3,632	2,421	1,211	-	631	6,502	7,393	5,545	3,696	1,848	1,075
			W	2,056	674	505	337	168	354	1,912	587	440	294	147	-	354	1,769	718	538	359	179

* Above data is for heating operation without any frost.

**PEAD-AA15NL
SUZ-AA15NLHZ**
1) COOLING

Rated
Q(Btu/h): 15,000
W: 1,150

		71°F / 21.7°C							67°F / 19.4°C							63°F / 17.2°C						
Indoor W.B.	Outdoor D.B.	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min			
115	46.1	Q(Btu/h)	13,693	13,693	10,270	6,846	-	5,295	12,822	12,822	9,616	6,411	-	4,958	11,701	11,701	8,776	5,851	-	4,524		
			W	1,292	1,292	969	646	-	438	1,260	1,260	945	630	-	427	1,208	1,208	906	604	-	410	
110	43.3	Q(Btu/h)	14,315	14,315	10,737	7,158	-	5,535	13,320	13,320	9,990	6,660	-	5,150	12,199	12,199	9,149	6,100	-	4,717		
			W	1,271	1,271	953	635	-	431	1,239	1,239	929	620	-	420	1,182	1,182	886	591	-	401	
105	40.6	Q(Btu/h)	14,938	14,938	11,203	7,469	-	5,776	13,817	13,817	10,363	6,909	-	5,343	12,822	12,822	9,616	6,411	-	4,958		
			W	1,255	1,255	941	628	-	426	1,208	1,208	906	604	-	410	1,155	1,155	866	578	-	392	
100	37.8	Q(Btu/h)	15,436	15,436	11,577	7,718	-	5,968	14,440	14,440	10,830	7,220	-	5,583	13,320	13,320	9,990	6,660	-	5,150		
			W	1,218	1,218	914	609	-	413	1,182	1,182	886	591	-	401	1,129	1,129	847	564	-	383	
95	35.0	Q(Btu/h)	16,058	16,058	12,044	8,029	-	6,209	15,000	15,000	11,250	7,500	-	5,800	13,942	13,942	10,456	6,971	-	5,391		
			W	1,197	1,197	898	599	-	406	1,150	1,150	863	575	-	390	1,103	1,103	827	551	-	374	
90	32.2	Q(Btu/h)	16,556	16,556	12,417	8,278	-	6,402	15,560	15,560	11,670	7,780	-	6,017	14,440	14,440	10,830	7,220	-	5,583		
			W	1,155	1,155	866	578	-	392	1,103	1,103	827	551	-	374	1,061	1,061	796	530	-	360	
85	29.4	Q(Btu/h)	17,178	17,178	12,884	8,589	-	6,642	16,183	16,183	12,137	8,091	-	6,257	15,062	15,062	11,297	7,531	-	5,824		
			W	1,113	1,113	835	557	-	378	1,061	1,061	796	530	-	360	1,024	1,024	768	512	-	347	
80	26.7	Q(Btu/h)	17,676	17,676	13,257	8,838	-	6,835	16,680	16,680	12,510	8,340	-	6,450	15,685	15,685	11,763	7,842	-	6,065		
			W	1,071	1,071	803	536	-	363	1,013	1,013	760	507	-	344	982	982	736	491	-	333	
75	23.9	Q(Btu/h)	18,299	18,299	13,724	9,149	-	7,076	17,178	17,178	12,884	8,589	-	6,642	16,245	16,245	12,184	8,122	-	6,281		
			W	1,024	1,024	768	512	-	347	966	966	725	483	-	328	944	944	708	472	-	320	
70	21.1	Q(Btu/h)	18,734	18,734	14,051	9,367	-	7,244	17,552	17,552	13,164	8,776	-	6,787	16,805	16,805	12,604	8,402	-	6,498		
			W	971	971	729	486	-	329	924	924	693	462	-	313	887	887	666	444	-	301	
67	19.4	Q(Btu/h)	18,921	18,921	14,191	9,461	-	7,316	17,925	17,925	13,444	8,963	-	6,931	17,178	17,178	12,884	8,589	-	6,642		
			W	924	924	693	462	-	313	887	887	666	444	-	301	840	840	630	420	-	285	

* It may not reach the above capacities in low ambient temperatures.

**PEAD-AA15NL
SUZ-AA15NLHZ**
2) HEATING

Rated

Q(Btu/h): 18,000
W: 1,290

Indoor D.B. Outdoor W.B. (°F) (°C)			77°F / 25.0°C						68°F / 20.0°C						59°F / 15.0°C						
			Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	
65	18.3	Q(Btu/h)	24,684	17,269	12,952	-	-	9,897	25,500	18,000	13,500	-	-	10,315	26,316	18,113	13,585	-	-	10,380	
			W	1,373	1,507	1,130	-	-	484	1,344	1,461	1,096	-	-	469	1,315	1,368	1,026	-	-	439
60	15.6	Q(Btu/h)	23,664	17,265	12,949	-	-	9,301	24,480	18,000	13,500	-	-	9,697	25,296	18,441	13,831	-	-	9,935	
			W	1,370	1,465	1,099	-	-	488	1,341	1,416	1,062	-	-	472	1,312	1,332	999	-	-	444
55	12.8	Q(Btu/h)	22,644	17,248	12,936	-	-	8,699	23,460	18,000	13,500	-	-	9,078	24,276	18,826	14,120	-	-	9,495	
			W	1,387	1,421	1,066	-	-	491	1,356	1,369	1,027	-	-	474	1,326	1,301	976	-	-	450
50	10.0	Q(Btu/h)	21,624	17,216	12,912	8,608	-	8,091	22,338	18,000	13,500	9,000	-	-	8,459	23,154	19,194	14,396	9,597	-	9,020
			W	1,422	1,376	1,032	688	-	493	1,390	1,322	992	661	-	474	1,358	1,276	957	638	-	457
45	7.2	Q(Btu/h)	17,730	16,918	12,688	8,459	-	7,478	18,450	17,738	13,304	8,869	-	-	7,840	19,170	19,341	14,506	9,671	-	8,549
			W	1,476	1,329	997	665	-	493	1,442	1,274	955	637	-	472	1,409	1,249	936	624	-	463
40	4.4	Q(Btu/h)	17,280	16,229	12,171	8,114	-	6,860	18,000	17,084	12,813	8,542	-	-	7,222	18,720	19,463	14,597	9,732	-	8,227
			W	1,550	1,281	961	641	-	491	1,513	1,224	918	612	-	469	1,477	1,233	925	617	-	472
35	1.7	Q(Btu/h)	17,280	15,522	11,642	7,761	-	6,238	18,000	16,430	12,323	8,215	-	-	6,603	18,720	19,106	14,329	9,553	-	7,678
			W	1,680	1,232	924	616	-	488	1,603	1,174	880	587	-	464	1,499	1,211	908	605	-	479
30	-1.1	Q(Btu/h)	17,280	14,616	10,962	7,308	-	5,613	18,000	15,583	11,688	7,792	-	-	5,984	18,720	18,083	13,562	9,042	-	6,944
			W	1,781	1,182	886	591	-	483	1,711	1,122	841	561	-	458	1,618	1,163	872	581	-	475
25	-3.9	Q(Btu/h)	17,280	13,422	10,066	6,711	-	4,985	18,000	14,447	10,835	7,224	-	-	5,365	18,720	17,588	13,191	8,794	-	6,532
			W	1,906	1,130	848	565	-	476	1,838	1,069	802	535	-	450	1,746	1,146	860	573	-	483
20	-6.7	Q(Btu/h)	17,280	12,212	9,159	6,106	-	4,355	18,000	13,311	9,983	6,655	-	-	4,747	18,720	16,627	12,470	8,314	-	5,929
			W	2,053	1,078	809	539	-	468	1,983	1,015	761	508	-	441	1,889	1,099	824	549	-	477
15	-9.4	Q(Btu/h)	17,280	10,987	8,240	5,493	-	3,725	18,000	12,175	9,131	6,087	-	-	4,128	18,720	15,575	11,681	7,787	-	5,281
			W	2,219	1,025	768	512	-	459	2,146	960	720	480	-	430	2,049	1,058	793	529	-	474
10	-12.2	Q(Btu/h)	17,280	9,743	7,307	4,871	-	3,097	18,000	11,038	8,279	5,519	-	-	3,509	18,720	14,525	10,893	7,262	-	4,617
			W	2,405	971	728	485	-	448	2,329	904	678	452	-	418	2,226	1,004	753	502	-	464
5	-15.0	Q(Btu/h)	17,280	8,477	6,358	4,239	-	2,475	18,000	9,902	7,426	4,951	-	-	2,890	18,720	13,161	9,870	6,580	-	3,842
			W	2,469	916	687	458	-	437	2,392	847	635	423	-	404	2,289	945	708	472	-	450
0	-17.8	Q(Btu/h)	13,393	7,186	5,390	3,593	-	1,862	16,028	8,766	6,574	4,383	-	-	2,272	14,423	10,905	8,179	5,452	-	2,826
			W	2,223	861	646	431	-	424	2,131	788	591	394	-	388	2,038	846	634	423	-	416
-4	-20.0	Q(Btu/h)	11,377	6,129	4,597	3,065	1,532	1,386	14,451	7,857	5,892	3,928	1,964	1,777	12,252	11,284	8,463	5,642	2,821	2,552	
			W	2,118	819	614	409	205	414	2,018	741	556	370	185	374	1,917	795	596	397	199	402
-13	-25.0	Q(Btu/h)	6,842	3,788	2,841	1,894	947	294	10,902	5,811	4,358	2,906	1,453	-	663	7,368	8,871	6,653	4,436	2,218	1,130
			W	2,017	724	543	362	181	340	1,876	631	474	316	158	340	1,736	772	579	386	193	410

* Above data is for heating operation without any frost.

**PEAD-AA18NL
SUZ-AA18NLHZ
1) COOLING**

Rated
Q(Btu/h): 18,000
W: 1,410

Indoor W.B.			71°F / 21.7°C						67°F / 19.4°C						63°F / 17.2°C					
Outdoor D.B. (°F)	Outdoor D.B. (°C)	Q(Btu/h)	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min
115	46.1	Q(Btu/h)	16,432	16,432	12,324	8,216	-	4,929	15,386	15,386	11,539	7,693	-	4,616	14,041	14,041	10,531	7,021	-	4,212
		W	1,584	1,584	1,188	792	-	438	1,545	1,545	1,159	773	-	427	1,481	1,481	1,111	740	-	410
110	43.3	Q(Btu/h)	17,178	17,178	12,884	8,589	-	5,154	15,983	15,983	11,988	7,992	-	4,795	14,639	14,639	10,979	7,320	-	4,392
		W	1,558	1,558	1,169	779	-	431	1,519	1,519	1,140	760	-	420	1,449	1,449	1,086	724	-	401
105	40.6	Q(Btu/h)	17,925	17,925	13,444	8,963	-	5,378	16,581	16,581	12,436	8,290	-	4,974	15,386	15,386	11,539	7,693	-	4,616
		W	1,539	1,539	1,154	769	-	426	1,481	1,481	1,111	740	-	410	1,416	1,416	1,062	708	-	392
100	37.8	Q(Btu/h)	18,523	18,523	13,892	9,261	-	5,557	17,328	17,328	12,996	8,664	-	5,198	15,983	15,983	11,988	7,992	-	4,795
		W	1,494	1,494	1,120	747	-	413	1,449	1,449	1,086	724	-	401	1,384	1,384	1,038	692	-	383
95	35.0	Q(Btu/h)	19,270	19,270	14,452	9,635	-	5,781	18,000	18,000	13,500	9,000	-	5,400	16,730	16,730	12,548	8,365	-	5,019
		W	1,468	1,468	1,101	734	-	406	1,410	1,410	1,058	705	-	390	1,352	1,352	1,014	676	-	374
90	32.2	Q(Btu/h)	19,867	19,867	14,900	9,934	-	5,960	18,672	18,672	14,004	9,336	-	5,602	17,328	17,328	12,996	8,664	-	5,198
		W	1,416	1,416	1,062	708	-	392	1,352	1,352	1,014	676	-	374	1,301	1,301	975	650	-	360
85	29.4	Q(Btu/h)	20,614	20,614	15,461	10,307	-	6,184	19,419	19,419	14,564	9,710	-	5,826	18,075	18,075	13,556	9,037	-	5,422
		W	1,365	1,365	1,024	682	-	378	1,301	1,301	975	650	-	360	1,255	1,255	942	628	-	347
80	26.7	Q(Btu/h)	21,212	21,212	15,909	10,606	-	6,363	20,017	20,017	15,012	10,008	-	6,005	18,822	18,822	14,116	9,411	-	5,646
		W	1,313	1,313	985	657	-	363	1,243	1,243	932	621	-	344	1,204	1,204	903	602	-	333
75	23.9	Q(Btu/h)	21,959	21,959	16,469	10,979	-	6,588	20,614	20,614	15,461	10,307	-	6,184	19,494	19,494	14,620	9,747	-	5,848
		W	1,255	1,255	942	628	-	347	1,185	1,185	888	592	-	328	1,158	1,158	868	579	-	320
70	21.1	Q(Btu/h)	22,481	22,481	16,861	11,241	-	6,744	21,062	21,062	15,797	10,531	-	6,319	20,166	20,166	15,124	10,083	-	6,050
		W	1,191	1,191	893	596	-	329	1,133	1,133	850	567	-	313	1,088	1,088	816	544	-	301
67	19.4	Q(Btu/h)	22,705	22,705	17,029	11,353	-	6,812	21,510	21,510	16,133	10,755	-	6,453	20,614	20,614	15,461	10,307	-	6,184
		W	1,133	1,133	850	567	-	313	1,088	1,088	816	544	-	301	1,030	1,030	773	515	-	285

* It may not reach the above capacities in low ambient temperatures.

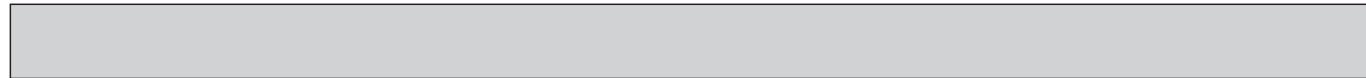
**PEAD-AA18NL
SUZ-AA18NLHZ**
2) HEATING

Rated

Q(Btu/h): 20,000
W: 1,510

Indoor D.B. Outdoor W.B. (°F) (°C)	Q(Btu/h)	77°F / 25.0°C						68°F / 20.0°C						59°F / 15.0°C						
		Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	
65	18.3 Q(Btu/h)	28,435	19,188	14,391	-	-	9,897	29,375	20,000	15,000	-	-	10,315	30,315	20,126	15,094	-	-	10,380	
		W	1,737	1,764	1,323	-	-	484	1,700	1,710	1,282	-	-	469	1,664	1,601	1,201	-	-	439
60	15.6 Q(Btu/h)	27,260	19,183	14,387	9,592	-	9,301	28,200	20,000	15,000	10,000	-	-	9,697	29,140	20,491	15,368	10,245	-	9,935
		W	1,733	1,715	1,286	857	-	488	1,696	1,657	1,243	829	-	472	1,659	1,559	1,169	779	-	444
55	12.8 Q(Btu/h)	26,085	19,164	14,373	9,582	-	8,699	27,025	20,000	15,000	10,000	-	-	9,078	27,965	20,918	15,688	10,459	-	9,495
		W	1,754	1,663	1,247	832	-	491	1,716	1,603	1,202	802	-	474	1,677	1,523	1,142	762	-	450
50	10.0 Q(Btu/h)	24,910	19,129	14,347	9,564	-	8,091	25,733	20,000	15,000	10,000	-	-	8,459	26,673	21,327	15,995	10,663	-	9,020
		W	1,799	1,610	1,208	805	-	493	1,758	1,548	1,161	774	-	474	1,718	1,493	1,120	747	-	457
45	7.2 Q(Btu/h)	19,700	18,797	14,098	9,399	-	7,478	20,500	19,709	14,782	9,855	-	-	7,840	21,300	21,490	16,118	10,745	-	8,549
		W	1,867	1,556	1,167	778	-	493	1,825	1,491	1,118	746	-	472	1,782	1,462	1,096	731	-	463
40	4.4 Q(Btu/h)	19,200	18,032	13,524	9,016	-	6,860	20,000	18,983	14,237	9,491	-	-	7,222	20,800	21,626	16,219	10,813	-	8,227
		W	1,960	1,500	1,125	750	-	491	1,914	1,433	1,075	717	-	469	1,868	1,443	1,083	722	-	472
35	1.7 Q(Btu/h)	19,200	17,247	12,935	8,624	-	6,238	20,000	18,256	13,692	9,128	-	-	6,603	20,800	21,229	15,922	10,614	-	7,678
		W	2,126	1,442	1,082	721	-	488	2,028	1,374	1,030	687	-	464	1,897	1,417	1,063	709	-	479
30	-1.1 Q(Btu/h)	19,200	16,240	12,180	8,120	-	5,613	20,000	17,315	12,986	8,657	-	-	5,984	20,800	20,092	15,069	10,046	-	6,944
		W	2,253	1,383	1,038	692	-	483	2,164	1,313	985	657	-	458	2,046	1,361	1,021	681	-	475
25	-3.9 Q(Btu/h)	19,200	14,913	11,185	7,457	-	4,985	20,000	16,052	12,039	8,026	-	-	5,365	20,800	19,542	14,656	9,771	-	6,532
		W	2,411	1,323	992	662	-	476	2,324	1,251	939	626	-	450	2,208	1,342	1,006	671	-	483
20	-6.7 Q(Btu/h)	19,200	13,569	10,177	6,785	-	4,355	20,000	14,790	11,092	7,395	-	-	4,747	20,800	18,475	13,856	9,237	-	5,929
		W	2,597	1,262	946	631	-	468	2,508	1,188	891	594	-	441	2,389	1,286	964	643	-	477
15	-9.4 Q(Btu/h)	19,200	12,207	9,155	6,104	-	3,725	20,000	13,527	10,145	6,764	-	-	4,128	20,800	17,305	12,979	8,653	-	5,281
		W	2,807	1,199	900	600	-	459	2,715	1,124	843	562	-	430	2,592	1,238	929	619	-	474
10	-12.2 Q(Btu/h)	19,200	10,825	8,119	5,413	-	3,097	20,000	12,265	9,199	6,132	-	-	3,509	20,800	16,138	12,104	8,069	-	4,617
		W	3,043	1,136	852	568	-	448	2,946	1,058	794	529	-	418	2,816	1,176	882	588	-	464
5	-15.0 Q(Btu/h)	19,200	9,419	7,064	4,710	-	2,475	20,000	11,002	8,252	5,501	-	-	2,890	20,800	14,623	10,967	7,311	-	3,842
		W	3,014	1,040	780	520	-	424	3,010	961	721	481	-	392	2,795	1,073	804	536	-	437
0	-17.8 Q(Btu/h)	15,428	7,985	5,989	3,992	1,996	1,862	17,809	9,740	7,305	4,870	2,435	-	2,272	16,615	12,116	9,087	6,058	3,029	2,826
		W	2,974	1,008	756	504	252	424	2,850	923	692	461	231	-	388	2,725	990	743	495	248
-4	-20.0 Q(Btu/h)	13,106	6,811	5,108	3,405	1,703	1,386	16,057	8,730	6,547	4,365	2,182	1,777	14,114	12,538	9,404	6,269	3,135	2,552	
		W	2,833	958	719	479	240	414	2,699	867	650	434	217	-	374	2,565	930	698	465	233
-13	-25.0 Q(Btu/h)	7,882	4,208	3,156	2,104	1,052	294	12,113	6,457	4,843	3,228	1,614	-	663	8,488	9,857	7,393	4,928	2,464	1,130
		W	2,698	848	636	424	212	340	2,510	739	554	370	185	-	340	2,322	903	677	452	226

* Above data is for heating operation without any frost.



**SVZ-AP12NL
SUZ-AA12NLHZ
1) COOLING**

Rated
Q(Btu/h): 12,000
W: 950

Indoor W.B.			71°F / 21.7°C						67°F / 19.4°C						63°F / 17.2°C					
Outdoor D.B. (°F)	Outdoor D.B. (°C)	Q(Btu/h)	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min
115	46.1	Q(Btu/h)	10,954	10,954	8,216	5,477	-	4,838	10,257	10,257	7,693	5,129	-	4,530	9,361	9,361	7,021	4,680	-	4,134
			W	1,067	1,067	800	534	-	438	1,041	1,041	781	521	-	427	998	998	748	499	-
110	43.3	Q(Btu/h)	11,452	11,452	8,589	5,726	-	5,058	10,656	10,656	7,992	5,328	-	4,706	9,759	9,759	7,320	4,880	-	4,310
			W	1,050	1,050	787	525	-	431	1,024	1,024	768	512	-	420	976	976	732	488	-
105	40.6	Q(Btu/h)	11,950	11,950	8,963	5,975	-	5,278	11,054	11,054	8,290	5,527	-	4,882	10,257	10,257	7,693	5,129	-	4,530
			W	1,037	1,037	778	518	-	426	998	998	748	499	-	410	954	954	716	477	-
100	37.8	Q(Btu/h)	12,349	12,349	9,261	6,174	-	5,454	11,552	11,552	8,664	5,776	-	5,102	10,656	10,656	7,992	5,328	-	4,706
			W	1,006	1,006	755	503	-	413	976	976	732	488	-	401	933	933	699	466	-
95	35.0	Q(Btu/h)	12,846	12,846	9,635	6,423	-	5,674	12,000	12,000	9,000	6,000	-	5,300	11,154	11,154	8,365	5,577	-	4,926
			W	989	989	742	495	-	406	950	950	713	475	-	390	911	911	683	455	-
90	32.2	Q(Btu/h)	13,245	13,245	9,934	6,622	-	5,850	12,448	12,448	9,336	6,224	-	5,498	11,552	11,552	8,664	5,776	-	5,102
			W	954	954	716	477	-	392	911	911	683	455	-	374	876	876	657	438	-
85	29.4	Q(Btu/h)	13,743	13,743	10,307	6,871	-	6,070	12,946	12,946	9,710	6,473	-	5,718	12,050	12,050	9,037	6,025	-	5,322
			W	920	920	690	460	-	378	876	876	657	438	-	360	846	846	634	423	-
80	26.7	Q(Btu/h)	14,141	14,141	10,606	7,071	-	6,246	13,344	13,344	10,008	6,672	-	5,894	12,548	12,548	9,411	6,274	-	5,542
			W	885	885	664	442	-	363	837	837	628	419	-	344	811	811	608	406	-
75	23.9	Q(Btu/h)	14,639	14,639	10,979	7,320	-	6,466	13,743	13,743	10,307	6,871	-	6,070	12,996	12,996	9,747	6,498	-	5,740
			W	846	846	634	423	-	347	798	798	599	399	-	328	780	780	585	390	-
70	21.1	Q(Btu/h)	14,988	14,988	11,241	7,494	-	6,620	14,041	14,041	10,531	7,021	-	6,202	13,444	13,444	10,083	6,722	-	5,938
			W	803	803	602	401	-	329	763	763	573	382	-	313	733	733	550	367	-
67	19.4	Q(Btu/h)	15,137	15,137	11,353	7,568	-	6,685	14,340	14,340	10,755	7,170	-	6,334	13,743	13,743	10,307	6,871	-	6,070
			W	763	763	573	382	-	313	733	733	550	367	-	301	694	694	521	347	-

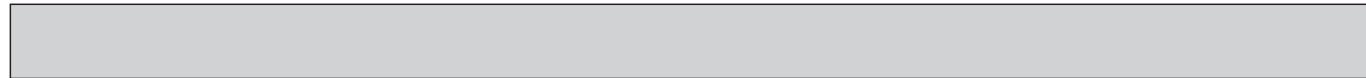
* It may not reach the above capacities in low ambient temperatures.

**SVZ-AP12NL
SUZ-AA12NLHZ**
2) HEATING

Rated
Q(Btu/h): 15,000
W: 1,200

Indoor D.B.			77°F / 25.0°C						68°F / 20.0°C						59°F / 15.0°C					
Outdoor W.B.		(°F)	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min
65	18.3	Q(Btu/h)	21,780	14,391	10,793	-	-	9,420	22,500	15,000	11,250	-	-	9,818	23,220	15,094	11,321	-	-	9,880
		W	1,382	1,402	1,052	-	-	514	1,353	1,359	1,019	-	-	499	1,324	1,272	954	-	-	467
60	15.6	Q(Btu/h)	20,880	14,387	10,791	-	-	8,852	21,600	15,000	11,250	-	-	9,229	22,320	15,368	11,526	-	-	9,456
		W	1,379	1,363	1,022	-	-	519	1,350	1,317	988	-	-	502	1,320	1,239	929	-	-	472
55	12.8	Q(Btu/h)	19,980	14,373	10,780	-	-	8,279	20,700	15,000	11,250	-	-	8,640	21,420	15,688	11,766	-	-	9,037
		W	1,396	1,322	991	-	-	523	1,365	1,274	955	-	-	504	1,335	1,210	908	-	-	479
50	10.0	Q(Btu/h)	19,080	14,347	10,760	-	-	7,701	19,710	15,000	11,250	-	-	8,052	20,430	15,995	11,996	-	-	8,586
		W	1,431	1,280	960	-	-	524	1,399	1,230	922	-	-	504	1,367	1,187	890	-	-	486
45	7.2	Q(Btu/h)	14,775	14,098	10,574	-	-	7,117	15,375	14,782	11,086	-	-	7,463	15,975	16,118	12,088	-	-	8,137
		W	1,486	1,236	927	-	-	524	1,452	1,185	889	-	-	502	1,418	1,161	871	-	-	492
40	4.4	Q(Btu/h)	14,400	13,524	10,143	6,762	-	6,529	15,000	14,237	10,678	7,118	-	6,874	15,600	16,219	12,165	8,110	-	7,831
		W	1,560	1,192	894	596	-	522	1,523	1,139	854	569	-	499	1,487	1,147	860	574	-	503
35	1.7	Q(Btu/h)	14,400	12,935	9,702	6,468	-	5,937	15,000	13,692	10,269	6,846	-	6,285	15,600	15,922	11,941	7,961	-	7,308
		W	1,692	1,146	860	573	-	519	1,614	1,092	819	546	-	494	1,509	1,126	845	563	-	510
30	-1.1	Q(Btu/h)	14,400	12,180	9,135	6,090	-	5,342	15,000	12,986	9,740	6,493	-	5,696	15,600	15,069	11,302	7,535	-	6,609
		W	1,793	1,099	825	550	-	514	1,722	1,044	783	522	-	487	1,629	1,082	811	541	-	505
25	-3.9	Q(Btu/h)	14,400	11,185	8,389	5,592	-	4,744	15,000	12,039	9,029	6,020	-	5,107	15,600	14,656	10,992	7,328	-	6,217
		W	1,919	1,052	789	526	-	507	1,850	994	746	497	-	479	1,757	1,066	800	533	-	514
20	-6.7	Q(Btu/h)	14,400	10,177	7,633	5,088	-	4,145	15,000	11,092	8,319	5,546	-	4,518	15,600	13,856	10,392	6,928	-	5,644
		W	2,067	1,003	752	501	-	498	1,996	944	708	472	-	469	1,901	1,022	766	511	-	508
15	-9.4	Q(Btu/h)	14,400	9,155	6,867	4,578	-	3,546	15,000	10,145	7,609	5,073	-	3,929	15,600	12,979	9,734	6,489	-	5,026
		W	2,234	953	715	477	-	488	2,161	893	670	447	-	458	2,063	984	738	492	-	504
10	-12.2	Q(Btu/h)	14,400	8,119	6,089	4,059	-	2,948	15,000	9,199	6,899	4,599	-	3,340	15,600	12,104	9,078	6,052	-	4,395
		W	2,284	903	677	451	-	477	2,211	841	631	420	-	444	2,114	934	701	467	-	494
5	-15.0	Q(Btu/h)	14,400	7,064	5,298	3,532	-	2,355	15,000	8,252	6,189	4,126	-	2,751	15,600	10,967	8,225	5,484	-	3,656
		W	2,196	827	620	413	-	451	2,193	764	573	382	-	417	2,036	852	639	426	-	465
0	-17.8	Q(Btu/h)	11,817	5,989	4,491	2,994	-	1,773	13,357	7,305	5,479	3,652	-	2,162	12,726	9,087	6,815	4,544	-	2,690
		W	2,166	801	601	401	-	451	2,076	733	550	367	-	413	1,985	787	590	393	-	443
-4	-20.0	Q(Btu/h)	10,039	5,108	3,831	2,554	-	1,319	12,043	6,547	4,910	3,274	-	1,691	10,811	9,404	7,053	4,702	-	2,429
		W	2,064	761	571	381	-	440	1,966	689	517	345	-	398	1,868	739	555	370	-	427
-13	-25.0	Q(Btu/h)	6,037	3,156	2,367	1,578	789	280	9,085	4,843	3,632	2,421	1,211	631	6,502	7,393	5,545	3,696	1,848	1,075
		W	1,965	674	505	337	168	362	1,828	587	440	294	147	362	1,691	718	538	359	179	436

* Above data is for heating operation without any frost.



**SVZ-AP18NL
SUZ-AA18NLHZ
1) COOLING**

Rated
Q(Btu/h): 18,000
W: 1,490

Indoor W.B. Outdoor D.B. (°F) (°C)	Q(Btu/h)	71°F / 21.7°C						67°F / 19.4°C						63°F / 17.2°C					
		Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min
115	46.1	16,432	16,432	12,324	8,216	-	5,112	15,386	15,386	11,539	7,693	-	4,787	14,041	14,041	10,531	7,021	-	4,368
		W	1,674	1,674	1,255	837	-	461	1,633	1,633	1,225	816	-	449	1,565	1,565	1,174	782	-
110	43.3	17,178	17,178	12,884	8,589	-	5,344	15,983	15,983	11,988	7,992	-	4,973	14,639	14,639	10,979	7,320	-	4,554
		W	1,646	1,646	1,235	823	-	453	1,606	1,606	1,204	803	-	442	1,531	1,531	1,148	765	-
105	40.6	17,925	17,925	13,444	8,963	-	5,577	16,581	16,581	12,436	8,290	-	5,159	15,386	15,386	11,539	7,693	-	4,787
		W	1,626	1,626	1,220	813	-	447	1,565	1,565	1,174	782	-	431	1,497	1,497	1,123	748	-
100	37.8	18,523	18,523	13,892	9,261	-	5,763	17,328	17,328	12,996	8,664	-	5,391	15,983	15,983	11,988	7,992	-	4,973
		W	1,578	1,578	1,184	789	-	434	1,531	1,531	1,148	765	-	421	1,463	1,463	1,097	731	-
95	35.0	19,270	19,270	14,452	9,635	-	5,995	18,000	18,000	13,500	9,000	-	5,600	16,730	16,730	12,548	8,365	-	5,205
		W	1,551	1,551	1,163	776	-	427	1,490	1,490	1,118	745	-	410	1,429	1,429	1,072	714	-
90	32.2	19,867	19,867	14,900	9,934	-	6,181	18,672	18,672	14,004	9,336	-	5,809	17,328	17,328	12,996	8,664	-	5,391
		W	1,497	1,497	1,123	748	-	412	1,429	1,429	1,072	714	-	393	1,374	1,374	1,031	687	-
85	29.4	20,614	20,614	15,461	10,307	-	6,413	19,419	19,419	14,564	9,710	-	6,041	18,075	18,075	13,556	9,037	-	5,623
		W	1,442	1,442	1,082	721	-	397	1,374	1,374	1,031	687	-	378	1,327	1,327	995	663	-
80	26.7	21,212	21,212	15,909	10,606	-	6,599	20,017	20,017	15,012	10,008	-	6,227	18,822	18,822	14,116	9,411	-	5,856
		W	1,388	1,388	1,041	694	-	382	1,313	1,313	985	657	-	361	1,272	1,272	954	636	-
75	23.9	21,959	21,959	16,469	10,979	-	6,832	20,614	20,614	15,461	10,307	-	6,413	19,494	19,494	14,620	9,747	-	6,065
		W	1,327	1,327	995	663	-	365	1,252	1,252	939	626	-	344	1,223	1,223	917	612	-
70	21.1	22,481	22,481	16,861	11,241	-	6,994	21,062	21,062	15,797	10,531	-	6,553	20,166	20,166	15,124	10,083	-	6,274
		W	1,259	1,259	944	629	-	346	1,197	1,197	898	599	-	329	1,150	1,150	862	575	-
67	19.4	22,705	22,705	17,029	11,353	-	7,064	21,510	21,510	16,133	10,755	-	6,692	20,614	20,614	15,461	10,307	-	6,413
		W	1,197	1,197	898	599	-	329	1,150	1,150	862	575	-	316	1,089	1,089	816	544	-

* It may not reach the above capacities in low ambient temperatures.

**SVZ-AP18NL
SUZ-AA18NLHZ**
2) HEATING

Rated

Q(Btu/h): 20,000
W: 1,530

Indoor D.B. Outdoor W.B. (°F) (°C)			77°F / 25.0°C						68°F / 20.0°C						59°F / 15.0°C						
			Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	Max	Rated	75%	50%	25%	Min	
65	18.3	Q(Btu/h)	28,798	19,188	14,391	-	-	10,016	29,750	20,000	15,000	-	-	10,440	30,702	20,126	15,094	-	-	10,505	
			W	1,801	1,788	1,341	-	-	504	1,763	1,733	1,299	-	-	489	1,725	1,622	1,216	-	-	457
60	15.6	Q(Btu/h)	27,608	19,183	14,387	9,592	-	9,413	28,560	20,000	15,000	10,000	-	-	9,814	29,512	20,491	15,368	10,245	-	10,054
			W	1,797	1,737	1,303	869	-	509	1,758	1,679	1,259	840	-	492	1,720	1,580	1,185	790	-	463
55	12.8	Q(Btu/h)	26,418	19,164	14,373	9,582	-	8,803	27,370	20,000	15,000	10,000	-	-	9,187	28,322	20,918	15,688	10,459	-	9,609
			W	1,818	1,685	1,264	843	-	512	1,778	1,624	1,218	812	-	494	1,739	1,543	1,157	772	-	469
50	10.0	Q(Btu/h)	25,228	19,129	14,347	9,564	-	8,188	26,061	20,000	15,000	10,000	-	-	8,561	27,013	21,327	15,995	10,663	-	9,129
			W	1,865	1,632	1,224	816	-	514	1,823	1,568	1,176	784	-	494	1,781	1,513	1,135	756	-	476
45	7.2	Q(Btu/h)	19,700	18,797	14,098	9,399	-	7,568	20,500	19,709	14,782	9,855	-	-	7,935	21,300	21,490	16,118	10,745	-	8,652
			W	1,936	1,576	1,182	788	-	514	1,891	1,511	1,133	755	-	492	1,847	1,481	1,111	740	-	482
40	4.4	Q(Btu/h)	19,200	18,032	13,524	9,016	-	6,943	20,000	18,983	14,237	9,491	-	-	7,309	20,800	21,626	16,219	10,813	-	8,326
			W	2,032	1,520	1,140	760	-	512	1,984	1,452	1,089	726	-	489	1,937	1,463	1,097	731	-	493
35	1.7	Q(Btu/h)	19,200	17,247	12,935	8,624	-	6,313	20,000	18,256	13,692	9,128	-	-	6,682	20,800	21,229	15,922	10,614	-	7,771
			W	2,204	1,461	1,096	731	-	508	2,102	1,392	1,044	696	-	484	1,966	1,436	1,077	718	-	499
30	-1.1	Q(Btu/h)	19,200	16,240	12,180	8,120	-	5,680	20,000	17,315	12,986	8,657	-	-	6,056	20,800	20,092	15,069	10,046	-	7,028
			W	2,335	1,402	1,051	701	-	503	2,244	1,331	998	665	-	478	2,121	1,379	1,034	690	-	495
25	-3.9	Q(Btu/h)	19,200	14,913	11,185	7,457	-	5,045	20,000	16,052	12,039	8,026	-	-	5,430	20,800	19,542	14,656	9,771	-	6,610
			W	2,500	1,341	1,006	670	-	497	2,410	1,268	951	634	-	470	2,289	1,360	1,020	680	-	504
20	-6.7	Q(Btu/h)	19,200	13,569	10,177	6,785	-	4,407	20,000	14,790	11,092	7,395	-	-	4,804	20,800	18,475	13,856	9,237	-	6,001
			W	2,692	1,279	959	639	-	488	2,600	1,204	903	602	-	460	2,477	1,303	977	651	-	498
15	-9.4	Q(Btu/h)	19,200	12,207	9,155	6,104	-	3,770	20,000	13,527	10,145	6,764	-	-	4,178	20,800	17,305	12,979	8,653	-	5,344
			W	2,910	1,215	911	608	-	479	2,815	1,139	854	569	-	448	2,687	1,255	941	627	-	494
10	-12.2	Q(Btu/h)	19,200	10,825	8,119	5,413	-	3,135	20,000	12,265	9,199	6,132	-	-	3,551	20,800	16,138	12,104	8,069	-	4,673
			W	3,154	1,151	863	576	-	468	3,053	1,072	804	536	-	435	2,919	1,191	893	596	-	484
5	-15.0	Q(Btu/h)	19,200	9,419	7,064	4,710	-	2,504	20,000	11,002	8,252	5,501	-	-	2,925	20,800	14,623	10,967	7,311	-	3,888
			W	3,221	1,086	815	543	-	442	3,121	974	731	487	-	408	2,897	1,087	815	543	-	455
0	-17.8	Q(Btu/h)	15,625	7,985	5,989	3,992	1,996	1,885	17,809	9,740	7,305	4,870	2,435	-	2,299	16,827	12,116	9,087	6,058	3,029	2,860
			W	3,083	1,022	766	511	255	442	2,954	935	701	467	234	-	405	2,825	1,003	752	502	251
-4	-20.0	Q(Btu/h)	13,273	6,811	5,108	3,405	1,703	1,403	16,057	8,730	6,547	4,365	2,182	-	1,798	14,294	12,538	9,404	6,269	3,135	2,583
			W	2,937	971	728	485	243	431	2,798	879	659	439	220	-	390	2,659	943	707	471	236
-13	-25.0	Q(Btu/h)	7,983	4,208	3,156	2,104	1,052	298	12,113	6,457	4,843	3,228	1,614	-	671	8,597	9,857	7,393	4,928	2,464	1,143
			W	2,797	859	644	429	215	354	2,602	749	562	374	187	-	354	2,407	915	686	458	229

* Above data is for heating operation without any frost.

Earthquake-proof strength analysis <Anchor bolt>

1.Type: S Series Inverter Outdoor unit

2.Model name: SUZ-AA09NLHZ

3.Specification

(1) Unit mass

$$W = [60.3] \text{ kg}$$

(2) Anchor bolt

1.The total number of bolts.

$$N = [4]$$

2.The size and shape.

$$" = M [10] \text{ type}$$

3.The axis section area per one bolt.

$$A = [78] \text{ mm}^2 = [78 \times 10^{-6}] \text{ m}^2$$

4.The total number of bolts in one side which be pulled stronger when the unit inverted.

$$N_t = [2]$$

(3) The height between the installing surface and the center of gravity of the unit

$$H_g = [383] \text{ mm} = [0.383] \text{ m}$$

(4) The bolt-span from the examination angle

$$L = [360] \text{ mm} = [0.360] \text{ m}$$

(5) The distance between the center of bolt and the center of gravity of the unit

$$L_g = [189] \text{ mm} (L_g \leq L/2) = [0.189] \text{ m}$$

4.The examination calculation (by rounding off to the first decimal place of each item)

(1) The horizontal seismic coefficient for designing

$$K_h = [1.0]$$

(2) The vertical seismic coefficient for designing

$$K_v = K_h/2 = [0.5]$$

(3) The horizontal earthquake forces for designing

$$F_h = K_h \cdot W \cdot 9.8 = [590.9] \text{ N}$$

(4) The vertical earthquake forces for designing

$$F_v = K_v \cdot W \cdot 9.8 = [295.5] \text{ N}$$

(5) The withdrawal strength of the anchor bolt $R_b = \frac{F_h \cdot H_g \cdot (W \cdot 9.8 - F_v) \cdot L_g}{L \cdot N_t}$

$$= [236.8] \text{ N}$$

(6) The shear forces of the anchor bolt

$$Q = F_h/N = [147.7] \text{ N}$$

(7) The stress arising to the anchor bolt

1.The tensile stress.

$$\sigma = R_b/A = [3.0] \text{ MPa} < f_t = 176 \text{ MPa}$$

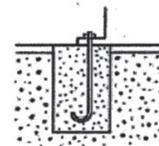
2.The shearing stress.

$$\tau = Q/A = [1.9] \text{ MPa} < f_s = 101 \text{ MPa}$$

3.The stress when affected by both the shearing and the tensile at the same time. $f_{ts}' = 1.4f_t - 1.6\tau = [243.4] \text{ MPa}$
However f_{ts} equals f_{ts}' when f_{ts}' less than or equal to f_t , and f_{ts} equal f_t when f_{ts}' is greater f_t .

$$\sigma = [3.0] \text{ MPa}$$

$$< f_{ts} = [101.0] \text{ MPa}$$



(8) The construction way of the anchor bolt

1.The construction way of the anchor bolt.

 $= \boxed{\text{Boxed J type anchor}}$

2.The thickness of the concrete.

$$= [120] \text{ mm} = [0.120] \text{ m}$$

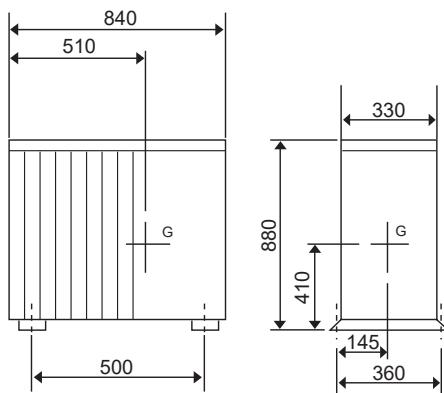
3.The length of buried part of bolt.

$$= [70] \text{ mm} = [0.070] \text{ m}$$

4.The permissible withdrawal weight.

$$T_a = [3136] \text{ N} > R_b = [237] \text{ N}$$

Since the results from the examination above, the anchor bolt has enough strength.



Earthquake-proof strength analysis <Anchor bolt>

1.Type: S Series Inverter Outdoor unit

2.Model name: SUZ-AA12NLHZ

3.Specification

(1) Unit mass

$$W = 60.3 \text{ kg}$$

(2) Anchor bolt

1.The total number of bolts.

$$N = 4$$

2.The size and shape.

$$" = M 10 \text{ type}$$

3.The axis section area per one bolt.

$$A = 78 \text{ mm}^2 = 78 \times 10^{-6} \text{ m}^2$$

4.The total number of bolts in one side which be pulled stronger when the unit inverted.

$$N_t = 2$$

(3) The height between the installing surface and the center of gravity of the unit

$$H_g = 383 \text{ mm} = 0.383 \text{ m}$$

(4) The bolt-span from the examination angle

$$L = 360 \text{ mm} = 0.360 \text{ m}$$

(5) The distance between the center of bolt and the center of gravity of the unit

$$L_g = 189 \text{ mm} (L_g \leq L/2) = 0.189 \text{ m}$$

4.The examination calculation (by rounding off to the first decimal place of each item)

(1) The horizontal seismic coefficient for designing

$$K_h = 1.0$$

(2) The vertical seismic coefficient for designing

$$K_v = K_h/2 = 0.5$$

(3) The horizontal earthquake forces for designing

$$F_h = K_h \cdot W \cdot 9.8 = 590.9 \text{ N}$$

(4) The vertical earthquake forces for designing

$$F_v = K_v \cdot W \cdot 9.8 = 295.5 \text{ N}$$

(5) The withdrawal strength of the anchor bolt $R_b = \frac{F_h \cdot H_g - (W \cdot 9.8 \cdot F_v) \cdot L_g}{L \cdot N_t}$

$$= 236.8 \text{ N}$$

(6) The shear forces of the anchor bolt

$$Q = F_h/N = 147.7 \text{ N}$$

(7) The stress arising to the anchor bolt

1.The tensile stress.

$$\sigma = R_b/A = 3.0 \text{ MPa} < f_t = 176 \text{ MPa}$$

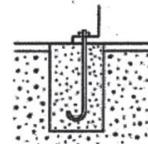
2.The shearing stress.

$$\tau = Q/A = 1.9 \text{ MPa} < f_s = 101 \text{ MPa}$$

3.The stress when affected by both the shearing and the tensile at the same time. $f_{ts}' = 1.4f_t - 1.6\tau = 243.4 \text{ MPa}$
However f_{ts} equals f_{ts}' when f_{ts}' less than or equal to f_t , and f_{ts} equal f_t when f_{ts}' is greater f_t .

$$\sigma = 3.0 \text{ MPa}$$

$$< f_{ts} = 101.0 \text{ MPa}$$



= Boxed J type anchor

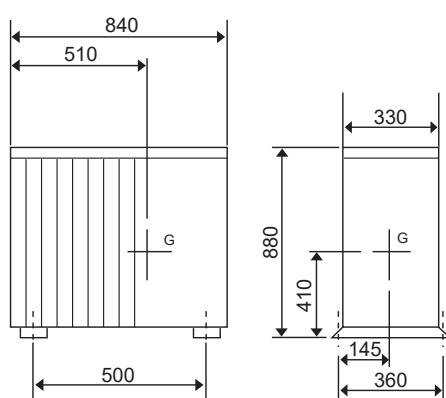
$$= 120 \text{ mm} = 0.120 \text{ m}$$

$$= 70 \text{ mm} = 0.070 \text{ m}$$

$$T_a = 3136 \text{ N} > R_b = 237 \text{ N}$$

(8) The construction way of the anchor bolt

1.The construction way of the anchor bolt.



Since the results from the examination above, the anchor bolt has enough strength.

Earthquake-proof strength analysis <Anchor bolt>

1.Type: S Series Inverter Outdoor unit

2.Model name: SUZ-AA15NLHZ

3.Specification

(1) Unit mass

W= 60.3 kg

(2) Anchor bolt

1.The total number of bolts.

N= 4

2.The size and shape.

"=M 10 type

3.The axis section area per one bolt.

A= 78 mm²= 78 × 10⁻⁶ m²

4.The total number of bolts in one side which be pulled stronger when the unit inverted.

Nt= 2

(3) The height between the installing surface and the center of gravity of the unit

Hg= 380 mm= 0.380 m

(4) The bolt-span from the examination angle

L= 360 mm= 0.360 m

(5) The distance between the center of bolt and the center of gravity of the unit

Lg= 189 mm(Lg≤L/2)= 0.189 m

4.The examination calculation (by rounding off to the first decimal place of each item)

(1) The horizontal seismic coefficient for designing

Kh= 1.0

(2) The vertical seismic coefficient for designing

Kv=Kh/2= 0.5

(3) The horizontal earthquake forces for designing

Fh=Kh·W·9.8= 590.9 N

(4) The vertical earthquake forces for designing

Fv=Kv·W·9.8= 295.5 N

(5) The withdrawal strength of the anchor bolt Rb= $\frac{F_h \cdot H_g - (W \cdot 9.8 - F_v) \cdot L_g}{L \cdot N_t}$

= 234.3 N

(6) The shear forces of the anchor bolt

Q=Fh/N= 147.7 N

(7) The stress arising to the anchor bolt

1.The tensile stress.

$\sigma = Rb/A = 3.0$ MPa < ft=176MPa

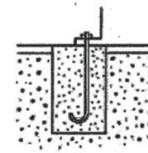
2.The shearing stress.

$\tau = Q/A = 1.9$ MPa < fs=101MPa

3.The stress when affected by both the shearing and the tensile at the same time. fts'=1.4ft-1.6 τ = 243.4 MPa
However fts equals fts' when fts' less than or equal to ft, and fts equal ft when fts' is greater ft.

$$\sigma = 3.0 \text{ MPa}$$

$$< fts= 101.0 \text{ MPa}$$



= Boxed J type anchor

$$= 120 \text{ mm} = 0.120 \text{ m}$$

$$= 70 \text{ mm} = 0.070 \text{ m}$$

$$Ta= 3136 \text{ N} > Rb= 234 \text{ N}$$

(8) The construction way of the anchor bolt

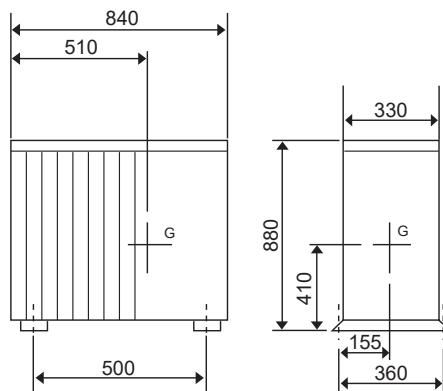
1.The construction way of the anchor bolt.

2.The thickness of the concrete.

3.The length of buried part of bolt.

4.The permissible withdrawal weight.

Since the results from the examination above, the anchor bolt has enough strength.



Earthquake-proof strength analysis <Anchor bolt>

1.Type: S Series Inverter Outdoor unit

2.Model name: SUZ-AA18NLHZ

3.Specification

(1) Unit mass

W= kg

(2) Anchor bolt

1.The total number of bolts.

N=

2.The size and shape.

"=M type

3.The axis section area per one bolt.

A= mm²=

4.The total number of bolts in one side which be pulled stronger when the unit inverted.

Nt=

(3) The height between the installing surface and the center of gravity of the unit

Hg= mm= m

(4) The bolt-span from the examination angle

L= mm= m

(5) The distance between the center of bolt and the center of gravity of the unit

Lg= mm(Lg≤L/2)= m

4.The examination calculation (by rounding off to the first decimal place of each item)

(1) The horizontal seismic coefficient for designing

Kh=

(2) The vertical seismic coefficient for designing

Kv=Kh/2=

(3) The horizontal earthquake forces for designing

Fh=Kh·W·9.8= N

(4) The vertical earthquake forces for designing

Fv=Kv·W·9.8= N

(5) The withdrawal strength of the anchor bolt Rb= $\frac{F_h \cdot H_g - (W \cdot 9.8 \cdot F_v) \cdot L_g}{L \cdot N_t}$

= N

(6) The shear forces of the anchor bolt

Q=Fh/N= N

(7) The stress arising to the anchor bolt

1.The tensile stress.

$\sigma = Rb/A = \frac{3.0}{3.0} \text{ MPa} < ft = 176 \text{ MPa}$

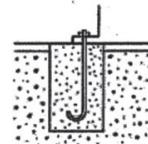
2.The shearing stress.

$\tau = Q/A = \frac{1.9}{3.0} \text{ MPa} < fs = 101 \text{ MPa}$

3.The stress when affected by both the shearing and the tensile at the same time. fts'=1.4ft-1.6τ = MPa
However fts equals fts' when fts' less than or equal to ft, and fts equal ft when fts' is greater ft.

$$\sigma = \frac{3.0}{3.0} \text{ MPa}$$

$$< fts = \frac{101.0}{3.0} \text{ MPa}$$



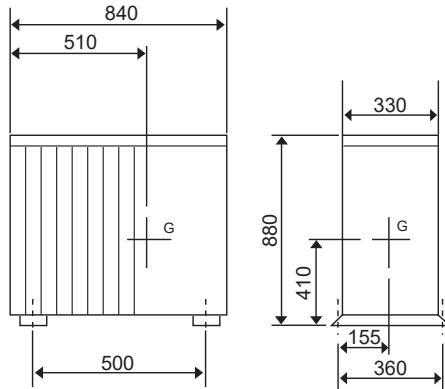
= Boxed J type anchor

$$= \frac{120}{3.0} \text{ mm} = \frac{0.120}{3.0} \text{ m}$$

$$= \frac{70}{3.0} \text{ mm} = \frac{0.070}{3.0} \text{ m}$$

$$Ta = \frac{3136}{3.0} \text{ N} > Rb = \frac{234}{3.0} \text{ N}$$

Since the results from the examination above, the anchor bolt has enough strength.



MITSUBISHI ELECTRIC CORPORATION

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